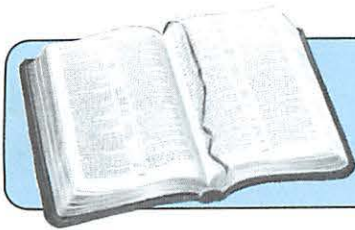


Wisdom Booklet 34



WISDOM QUIZ

Matthew 6:11

"Give us this day our daily bread."



How well do you understand the concept of daily bread?

1 The request for bread is to be a daily reminder of our sinful nature. ☒ ☐
(Read Genesis 3:17-19.)

- Before the fall food was abundantly available to Adam and Eve. They could freely eat any fruit that they desired, except one. After the fall the ground was cursed, the abundant choices were taken away, and man had to work by the sweat of his brow for bread.

Part of the curse of Adam's sin is our need to work for daily bread. ☐ ☒
(See Genesis 2:15.)

2 The instruction to pray for daily bread is given to help us realize how dependent we are upon God. ☒ ☐
(Read Psalm 104:27-29.)

- God knows that when we have full stomachs, we tend to lose our love for Him and to forget Him. (See Deuteronomy 6:10-12.) Thus, He requires that we draw from Him daily breath, daily bread, daily protection, and daily wisdom.

Based on the principle of this prayer, employers are to pay poor workers at the end of each day. ☒ ☐
(See Deuteronomy 24:14-15.)

3 God promises to give sufficient bread to every person who asks Him for it. ☐ ☒
(Read II Thessalonians 3:7-12.)

- Based on the fact that our daily bread is a reminder of Adam's fall, we must labor in order to receive food. God will give opportunity for labor, and those who are not able to work are to be provided for by their families or by the church. (See I Timothy 5:8.)

God does not want food to be given to one who refuses to work for it. ☒ ☐
(See Proverbs 19:15.)

4 The instruction to pray for daily bread refers primarily to meat and potatoes rather than bread. ☐ ☒
(Read Matthew 14:15-21.)

- Although the Greek word for bread can include other food, it refers primarily to loaves of wheat and barley bread. When God fed Israel in the wilderness, He gave them only bread, and they lusted for meat. When Jesus fed the five thousand, the main item was bread, and the minor item was fish. If we would major on bread in our diets we would avoid many unnecessary diseases.

Those who teach that we should not eat any meat are presenting a false doctrine. ☒ ☐
(See Genesis 9:3; I Timothy 4:1-6.)

Total Correct 8

Guide Me, O Thou Great Jehovah

Rev. William Williams

Welsh Hymn Melody

In moderate time



1. Guide me, O Thou great Je - ho - vah, Pil - grim through this
2. O - pen now the crys - tal foun - tain, Whence the heal - ing
3. When I tread the verge of Jor - dan, Bid my anx - ious



bar - ren land; I am weak, but Thou art might - y; Hold me with Thy stream doth flow; Let the fire and cloud - y pil - lar Lead me all my fears sub - side; Death of death, and hell's De - struc - tion, Land me safe on



power - ful hand; Bread of heav - en, Bread of heav - en, jour - ney through; Strong De - liv - erer, strong De - liv - erer, Ca - naan's side; Songs of praise - es, songs of prais - es

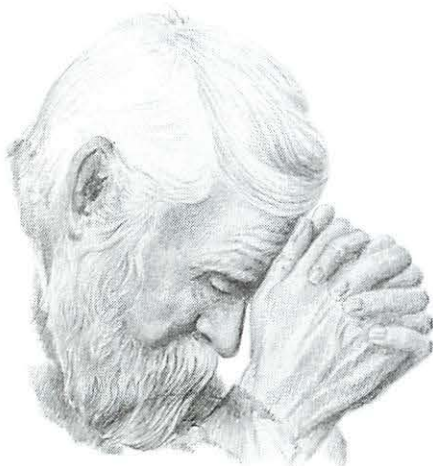


Feed me till I want no more, Feed me till I want no more. Be Thou still my Strength and Shield, Be Thou still my Strength and Shield. I will ev - er give to Thee, I will ev - er give to Thee. A-MEN.

WISDOM WORKSHEET ON MATTHEW 6:11



**“GIVE US THIS DAY
OUR DAILY BREAD.”**



Most people who pray, “Give us this day our daily bread,” do not realize what they are requesting or how God will provide it.



- While “bread” can mean any food, it refers particularly to prepared grains. It can also refer to God’s Word.
- God provides daily bread through the diligent labor of an individual. Those who are unable to work should receive daily bread through their families or the local church rather than from the government.
- By understanding the nutritional structure of wheat we see the wisdom of making bread on a daily basis.

Linguistics

Languages,
Grammar, Vocabulary,
Communication



GIVE

Greek: δίδωμι (DIH-doe-me)

DEFINITION: Seventeen different Greek words are translated *give* in English. This particular Greek word has a wide meaning. In this context it means to bestow of one’s own accord; to provide something beneficial; to furnish necessary things.

US

Greek: ἡμῖν (hay-MINN)

INSIGHT: We are not to pray, “give me,” but rather, “give us.” The plural indicates a community of people. Whoever receives provisions from the Lord is expected to share them as God directs. “. . . Freely ye have received, freely give” (Matthew 10:8).

THIS DAY

Greek: σήμερον (SAY-meh-ronn)

INSIGHT: The request is to be answered on the day in which it is made, and only enough is requested to meet one day’s needs. Thus, God is teaching daily dependence upon Himself, the Heavenly Father.

DAILY

Greek: ἐπιούσιος (eh-pih-OO-sih-oss)

INSIGHT: This compound word occurs nowhere else in Scripture or classical Greek. Its meaning from the context is, “bread sufficient for today’s existence.”

Do Resource A.

BREAD

Greek: ἄρτος (ARE-toss)

INSIGHT: This describes a small loaf or cake made from ground wheat or barley. Bread was the staple diet. For most, it was their only food. The word can also refer to other foods. It further denotes subsistence provisions as opposed to luxury banqueting.

Do Resource B.

History

Archaeology,
Geography, Prophecy,
Music, Art, Literature



How is the prayer for daily bread a prayer for labor and sweat?



World Book, Inc.

Thistles—serious
pests to grain fields

When Adam and Eve sinned, God cursed the ground for their sake. “. . . In sorrow shalt thou eat of it all the days of thy life; Thorns also and thistles shall it bring forth to thee . . . in the sweat of thy face shalt thou eat bread . . .” (Genesis 3:17–19).

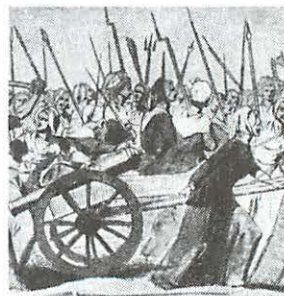
How did God use manna to confirm His design for daily bread?

God required that manna be gathered each morning by each family unit. It could not be stored except in preparation for the Sabbath.



©Providence Lithograph

Gathering manna



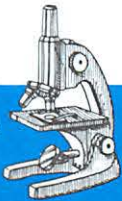
How was white bread a cause of the French Revolution?

Throughout history white bread has been a symbol of the rich man’s food. French peasants envied the rich and rose up in arms when grain became scarce. In 1789 thousands marched on the palace demanding flour. They soon discovered that the King had none either.

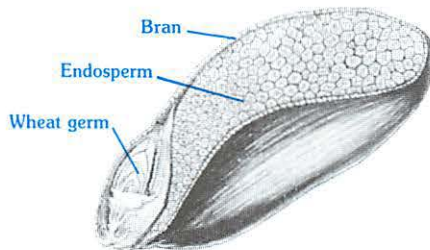
Do Resource C.

Science

Chemistry, Biology,
Astronomy, Geology,
Physics, Mathematics

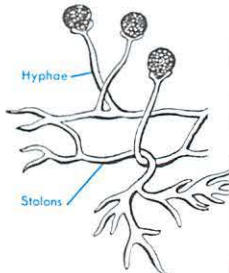


What laws did God build into grain that require us to pray for it daily?

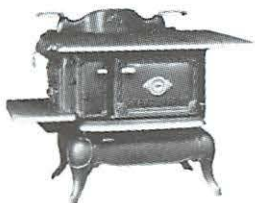


As soon as the protective hull of a grain of wheat is cracked, it begins to deteriorate.

The oil in the wheat germ quickly becomes rancid, bacteria in whole wheat flour causes it to grow mold rapidly, and the chemicals making up the vitamins begin to oxidize.



The growth of bread mold



Crown Stove Works

Cast iron range

Does baking bread stop its deterioration?

Do Resource D.



What essential element does the U.S. RDA miss in establishing guidelines for our daily bread?

Do Resource E.

Law

Government,
Economics, Logic



What legal problems develop when God's design for daily bread is violated?

Adding unhealthy preservatives to bread has been a long-standing problem. The bakers of Pompeii had to mark their bread so that sick customers could trace the source of their ailments.



A Pompeii bakery

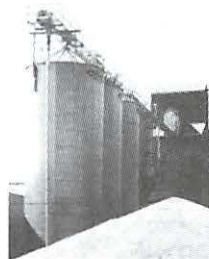
In the eighteenth century millers would mix alum in bread over the protest of doctors. In England laws were passed in 1832 and 1836 which stated, "It shall and may be lawful . . . to make and sell . . . bread made of flour or meal . . . with any (common) salt, pure water, eggs, milk, barm, leaven, potato or other yeast, . . . and with no other ingredients or matter whatsoever."

Today, bakeries in the United States are removing most of the nutritional value of the wheat and adding chlorine dioxide to bleach the wheat for whiter, longer-lasting bread.

How is daily pay consistent with the prayer for daily bread?

Employees would get more money and become more productive if they were paid on a daily basis. This is the wise counsel given in Leviticus 19:13: "... The wages of him that is hired shall not abide with thee all night until the morning."

What are the consequences when government takes over the role of providing daily bread?



Grain elevator

Do Resource F.

Medicine

Health,
Nutrition, Behavior,
Counseling



How does eating whole-grain bread decrease the risk of many diseases?

The culprit causing many of our diseases is not high blood pressure, high cholesterol, high blood sugar level or any of a host of other popular health indicators. It is the rarely discussed national condition of constipation.

The longer food lies in the digestive tract, the greater danger there is of carcinogens (cancer-causing agents) carrying out their deadly work. Constipation is lessened as fiber is added to the diet.



Fiber is like a sponge which absorbs moisture as well as carcinogens.



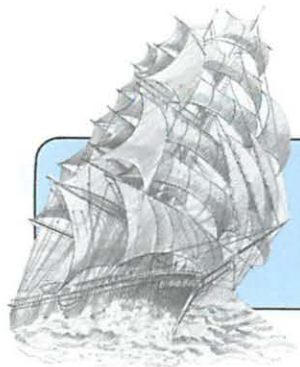
One whole-meal loaf increases stool output as much as eight white loaves.

Greater stool output reduces the occurrence of such diseases as colon cancer, appendicitis, hiatus hernia, hemorrhoids, varicose veins, and heart disease.

Do Resource G.

How can you lose weight by eating more whole-wheat bread?

In a scientific study at Michigan State University, overweight young men ate twelve slices of bread a day in addition to whatever else they ate. After eight weeks, they lost an average of 19.4 pounds each. (Reported in *Reader's Digest*, November 1987, page 159-172).



RESOURCE QUIZ

How many of these questions can you answer before studying the resources?

HOW DOES BREAD RELATE TO RICHES?



- What is the precise meaning of daily bread? 1683
- What significance does the Greek sentence structure add to daily bread? 1684
- What questions can unlock the meaning and application of Scripture? 1685
- How did God use daily bread in the wilderness to prepare His people for riches, honor, and life? . . . 1686

HOW CAN BREAD CONQUER PRIDE?



- What is the witness of the first and last mention? . . . 1687
- How does the witness of first and last mention confirm the meaning of daily bread? 1688
- What are the symptoms of pride? 1689
- How can daily bread conquer pride? 1690

WHAT IS THE HISTORY OF WHITE BREAD?



- How did the whiteness of a man's bread determine his social status in first-century Rome? 1697
- How did Egyptians make white bread in 1,000 BC? . 1700
- How did white bread help bring about the French Revolution? 1701
- How did Pompeii bakers corrupt white bread? 1702

WHY MUST BREAD BE MADE DAILY?



- At what point does bread begin to deteriorate? 1703
- What three factors cause bread to spoil? 1704
- How do millers damage wheat in making white flour? . 1705
- How is nutrition decreased by quick baking? 1708
- Why does good bread not guarantee good health? . . . 1711

WHAT DO RDA GUIDELINES MISS?



- How did the U.S. RDA come into being? 1713
- Why have the necessary revisions in the U.S. RDA not been made? 1714
- How are RDA tables to be used? 1715
- How did a public health study discover the missing ingredient in RDA? 1717

WHAT IS WRONG WITH BREAD HANDOUTS?

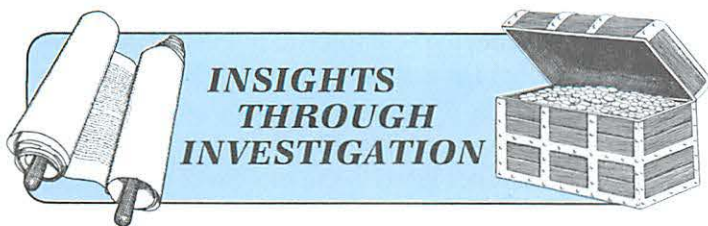


- How did government food programs originate? 1719
- How do government policies promote waste? 1720
- How effective is the food stamp program? 1722
- How do government farm programs increase greed and damage self-worth? . . 1724
- Why have farm price supports been ineffective? . . . 1727

WHY IS WHITE BREAD DEADLY?



- What is the chief cause of Western diseases? 1731
- How does fiber reduce the danger of cancer? 1732
- How can daily bread eliminate appendicitis? 1733
- What is the best treatment for hemorrhoids? 1735
- How can you lose weight by eating more bread? . . . 1737



INSIGHTS THROUGH INVESTIGATION

HOW DOES THE STUDY OF THE WORD "BREAD" REVEAL GOD'S WAY TO RICHES, HONOR, AND LIFE?



H. Armstrong Roberts

The importance of the word *bread* is indicated by the fact that it is mentioned 330 times throughout the Bible, that we are to make this word a part of our daily prayer, and that Jesus used this word to describe Himself.

There are rich rewards for the one who will make a diligent study of the word *bread* in Scripture. Such a study would involve the following steps:

1 READ THE VERSE.

"Give us this day our daily bread"
(Matthew 6:11).

2 STUDY THE CONTEXT.

This verse is the fifth statement in the Lord's prayer. It follows a request for the will of God to be done on earth as it is in heaven. It precedes the passage on forgiving those who have offended us.

3 FIND THE MEANING OF THE WORD.

By looking up the word *bread* in your Strong's Concordance, you will note that the number after the verse is 740.

that these stones be made b.....	Mt 4:3	740
Man shall not live by b alone.....	Mt 4:4	740
Give us this day our daily b.....	Mt 6:11	740
of you, whom if his son ask b.....	Mt 7:9	740
not their hands when they eat b.....	Mt 15:2	740
not meet to take the children's b.....	Mt 15:26	740
have so much b in the wilderness.....	Mt 15:33	740
they had forgotten to take b.....	Mt 16:5	740
It is because we have taken no b.....	Mt 16:7	740
because ye have brought no b.....	Mt 16:8	740
spake it not to you concerning b.....	Mt 16:11	740
not beware of the leaven of b.....	Mt 16:12	740
b the disciples came to Jesus.....	Mt 26:17	740
as they were eating, Jesus took b.....	Mt 26:26	740

When you look up this number in the Greek dictionary at the back of the concordance, you will discover the following definition:

740. ἄρτος artos, ar'-tos; from 142; bread (as raised) or a loaf:—(shew-) bread, loaf.

4 EXPAND YOUR UNDERSTANDING OF THE WORD.

Notice how the word is used in other contexts by finding the same number at the end of other entries in your Strong's Concordance. Then look up the expanded definition of *bread* (740) in Thayer's Greek-English Lexicon of the New Testament.

740. ἄρτος, -ου, ὁ

1. food composed of flour mixed with water and baked; the Israelites made it in the form of an oblong or round cake, as thick as one's thumb, and as large as a plate or platter (cf. *Win. R W B. s. v. Backen*; [BB.DD.]); hence it was not cut, but broken (see *κλάσις* and *κλάω*): Mt. iv. 3; vii. 9; xiv. 17, 19; Mk. vi. 36 [T Tr WH om. L br.], 37 sq.; Lk. iv. 3; xxiv. 30; Jn. vi. 5 sqq.; Acts xxvii. 35, and often; ἄρτοι τῆς προθέσεως, loaves consecrated to Jehovah, see *πρόθεσις*; on the bread used at the love-feasts and the sacred supper [W. 35], cf. Mt. xxvi. 26; Mk. xiv. 22; Lk. xxii. 19; Acts ii. 42, 46; xx. 7; 1 Co. x. 16 sq.; xi. 26-28. 2. As in Grk. writ., and like the Hebr. *סֶחָו*, food of any kind: Mt. vi. 11; Mk. vi. 8; Lk. xi. 3; 2 Co. ix. 10; ὁ ἄρτος τῶν τέκνων the food served to the children, Mk. vii. 27; ἄρτον φαγεῖν or ἐσθίειν to take food, to eat (סֶחָו לֶחֶם) [W. 33 (32)]: Mk. iii. 20; Lk. xiv. 1, 15; Mt. xv. 2; ἄρτον φαγεῖν παρά τινος to take food supplied by one, 2 Th. iii. 8; τὸν ἑαυτοῦ ἄρτ. ἐσθίειν to eat the food which one has procured for himself by his own labor, 2 Th. iii. 12; μήτε ἄρτον ἐσθίων, μήτε οἶνον πίνων, abstaining from the usual sustenance, or using it sparingly, Lk. vii. 33; τρώγειν τὸν ἄρτον μετὰ τινος to be one's table-companion, his familiar friend, Jn.

xiii. 18 (Ps. xl. (xli.) 10). In Jn. vi. 32–35 Jesus calls himself τὸν ἄρτον τοῦ θεοῦ, τ. ἄ. ἐκ τοῦ οὐρανοῦ, τ. ἄ. τῆς ζωῆς, as the divine λόγος, come from heaven, who containing in himself the source of heavenly life supplies celestial nutriment to souls that they may attain to life eternal.

5 NOTICE THE SENTENCE STRUCTURE.

By using the *Interlinear Greek-English New Testament* you will notice that the structure of the Greek sentence is different from the English. The sentence begins with *bread*, rather than the phrase “give me.”

This initial placement is called the *emphatic position* and makes *bread* the most important word in the sentence.

3588 740 2257 3588 1967
11 τὸν ἄρτον ἡμῶν τὸν ἐπιούσιον
our bread the needed

1325 2254 4594
δὸς ἡμῖν σήμερον
give us today;

6 LOOK UP CROSS-REFERENCES.

There are several ways to cross-reference a word. You can look up the word in *Strong's Concordance*, or you can look up the word in the *New Englishman's Greek Concordance of the New Testament*, which is shown as follows:

740 ἄρτος, artos.

Mat. 4: 3. command that these stones be made bread.

4. Man shall not live by bread alone,

6:11. Give us this day our daily bread.

7: 9. whom if his son ask bread, will

12: 4. did eat the shewbread, which

14:17. We have here but five loaves,

19. took the five loaves, and the two fishes,
— gave the loaves to (his) disciples,

15: 2. their hands, when they eat bread.

26. not meet to take the children's bread,

33. should we have so much bread

34. How many loaves have ye?

36. he took the seven loaves and the fishes,

16: 5. they had forgotten to take bread.

7. because we have taken no bread.

8. because ye have brought no bread?

9. neither remember the five loaves

10. Neither the seven loaves of the

11. not to you concerning bread,

12. not beware of the leaven of bread,

26:26. Jesus took bread, and blessed (it),

Notice that the reference to bread just previous to Matthew 6:11 is a statement which Jesus gave to Satan during His temptation. By looking in *Strong's Concordance* we can identify the source of Jesus' quotation if it is not listed in the margin of your Bible.

that man doth not live by b only	Deut 8:3	3899
shalt eat b without scarceness	Deut 8:9	3899
neither did eat b nor drink water	Deut 9:9	3899
I did neither eat b, nor drink	Deut 9:18	3899
shalt eat no leavened b with it	Deut 16:3	
thou eat unleavened b therewith	Deut 16:3	
even the b of affliction	Deut 16:3	3899
there shall be no leavened b seen	Deut 16:4	
days thou shalt eat unleavened b	Deut 16:8	
in the feast of unleavened b	Deut 16:16	
Because they met you not with b	Deut 23:4	3899
Ye have not eaten b, neither have	Deut 29:6	3899

7 STUDY SELECTED CROSS-REFERENCES.

As you read the cross-references, certain ones will stand out significantly. The Deuteronomy passage which Jesus quoted would certainly be one of the cross-references.

“All the commandments which I command thee this day shall ye observe to do, that ye may live, and multiply, and go in and possess the land which the Lord sware unto your fathers.

“And thou shalt remember all the way which the Lord thy God led thee these forty years in the wilderness, to humble thee, and to prove thee, to know what was in thine heart, whether thou wouldest keep his commandments, or no.

“And he humbled thee, and suffered thee to hunger, and fed thee with manna, which thou knewest not, neither did thy fathers know; that he might make thee know that man doth not live by bread only, but by every word that proceedeth out of the mouth of the Lord doth man live” (Deuteronomy 8:1–3).

8 MEDITATE ON THE PASSAGE.

The true meaning of a passage will never be comprehended with our minds only. If we simply depend on our intellect, we will be easily led astray by pride.

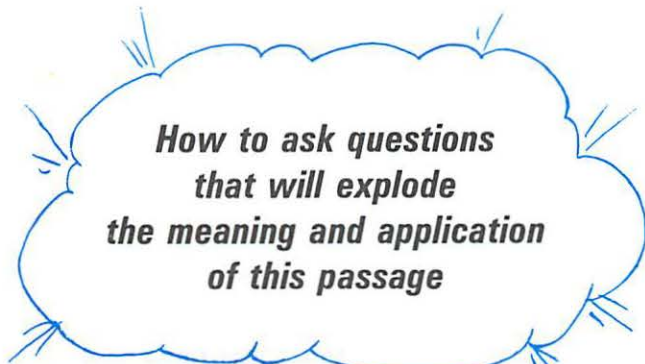


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Knowledge puffs up. (See I Corinthians 8:1–3.) Meditation requires communing with the Holy Spirit, Who is the author and teacher of Scripture.

One of the vital functions of the Holy Spirit is to guide us into the truth of a particular passage. (See John 16:12.) A second function of the Holy Spirit is to convict us of things in our lives that are not pleasing to the Lord. It is, therefore, a healthy signal when such conviction results from a meditation.

Meditation involves asking certain questions of the passage and, as far as possible, picturing the answers as they would apply to our lives.



**How to ask questions
that will explode
the meaning and application
of this passage**

The following words are to be used for meditating on the passage. The resulting insights will indicate where further study and research are needed.

WHAT:

- ☐ Key words
- ☐ Plural nouns
- ☐ Admonitions
- ☐ Promise
- ☐ Encouragements
- ☐ Reasons
- ☐ Results
- ☐ Contrasts
- ☐ Comparisons
- ☐ Illustrations
- ☐ Repetition of words
- ☐ Progression of ideas
- ☐ Questions
- ☐ Important connectives
- ☐ Grammatical construction
- ☐ Atmosphere
- ☐ Literary form
- ☐ General structure
- ☐ Evidence of condition

WHERE:

- ☐ Indications of direction

WHEN:

- ☐ Time elements
- ☐ Past/present/future

WHO:

- ☐ Characters
- ☐ Names
- ☐ Meaning of names
- ☐ Characteristics

WHY:

- ☐ What does the message mean?
- ☐ Why should I believe it?
- ☐ What difference does it make?
- ☐ Is there a list?
- ☐ What does the passage say to me?

9 COMBINE MEDITATION AND STUDY.

In the short space of this resource it would not be possible to answer all of these questions fully. However, the following observations will help us discover how daily bread is God's way to riches, honor, and life.

KEY WORDS

Wilderness, humble, prove, heart, commandments, bread, live

PLURAL NOUNS

Commandments, fathers, years

ADMONITIONS

- ☐ All the commandments shall ye observe to do.
- ☐ Thou shalt remember all the way.
- ☐ Man doth not live by bread only.

PROMISES

- ☐ Ye may live and multiply and go in and possess the land.

REPETITION OF WORDS

Commandment, humble, fathers, live, Lord

ENCOURAGEMENTS

That he might make thee know that man doth not live by bread only

REASONS

Forty years in the wilderness:

- ☐ to humble thee
- ☐ to prove thee
- ☐ to know what was in thine heart
- ☐ to make thee know

RESULTS

Achieving Godly humility through daily hunger

CONTRASTS

Physical bread and spiritual bread

COMPARISONS

God's Word to manna and daily bread

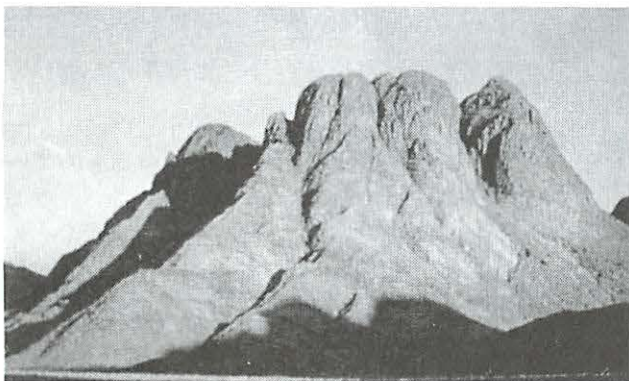
ILLUSTRATIONS

Wilderness experience, gathering manna daily

REPETITION OF WORDS

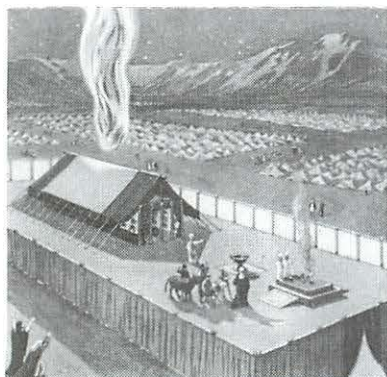
Humble thee (v. 2, 3)

10 PICTURE THE HISTORICAL SETTING.



Discovering the Biblical World, Harry Thomas Frank

The barrenness of the Sinai wilderness must be understood in order to be appreciated.



Bible Art Series, Standard Publishing, Cincinnati

God's humbling of the nation of Israel during their wilderness journey involved several million people.

The tabernacle was at the center of their encampment.

11 BE ALERT TO OTHER RELATED PASSAGES.

In this passage God explains how He humbled the nation of Israel and proved them to see what was in their hearts. The process of humbling is highly significant, because humility is the one quality that God promises to bless if we have it and punish if we fail to have it.

“... God resisteth the proud, but giveth grace unto the humble” (James 4:6).

“These six things doth the Lord hate . . . A proud look . . .” (Proverbs 6:16–17).

“Humble yourselves therefore under the mighty hand of God, that he may exalt you in due time” (1 Peter 5:6).

12 DRAW CONCLUSIONS FOR APPLICATION.

There is a powerful conclusion in Deuteronomy 8:3, “And he humbled thee, and suffered thee to hunger, and fed thee with manna . . . that he might make thee know that man shall not live by bread only . . .”

In the wilderness God humbled his people first by allowing them to suffer physical hunger and then by providing only enough food for each day's need. The purpose of this humbling was to provide a daily reminder of the importance of living by God's Word and obeying every part of it.

The person who is never hungry will soon forget the Lord and his need to keep the commandments of the Lord.

This result, in fact, was what God warned the nation of Israel about in Deuteronomy 8:10–14.

13 IDENTIFY THE REWARDS.

How does humility through hunger and daily bread relate to riches, honor, and life?

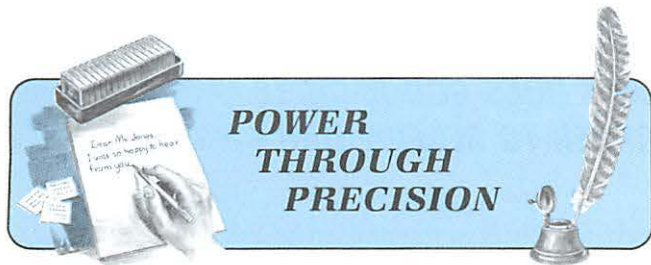
In the passage itself there is promise of life, riches, and honor to those who are humble and keep God's commandments. This same promise is restated in the following passage:

“By humility and the fear of the Lord are riches, and honour, and life” (Proverbs 22:4).

PROJECT

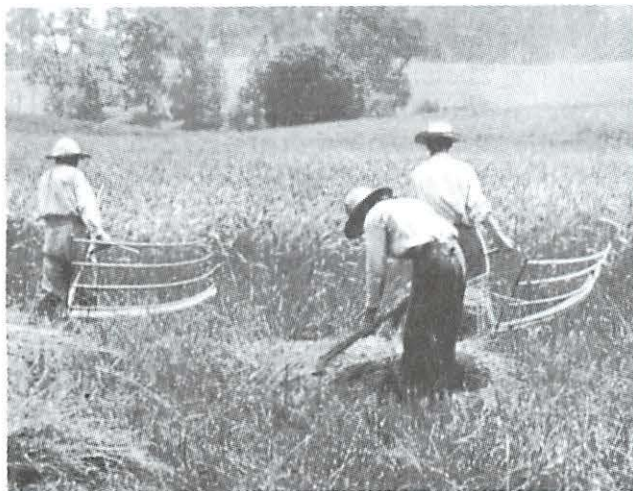
Continue to apply the questions on the previous page to the passage in Deuteronomy. Discover as many insights as you can on how God uses daily bread to humble us.

Date completed _____ Evaluation _____



POWER THROUGH PRECISION

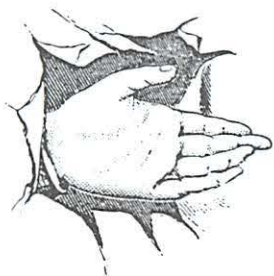
HOW DOES THE WITNESS OF FIRST AND LAST MENTION REVEAL THE WAY GOD GIVES DAILY BREAD?



Wisconsin State Historical Society

**Is this an accurate picture of the way in which
God answers our prayer for daily bread?**

What picture does God want us to have in our minds when we make the petition, "Give us this day our daily bread"? Having an accurate picture is essential in order to understand what we are praying for and to comprehend the ways of the Lord in answering this prayer.



Dover, Inc.

Many Christians have in their minds the picture of a child of God claiming the right to hold out his hand to an obligated Heavenly Father and expect to receive from God the food he thinks he needs.

This is not the picture that God had in His mind when he taught us to pray, "Give us this day our daily bread."

We are able to comprehend a more accurate and precise picture of what God intended by understanding the witness of other Scriptures dealing with bread. **In studying other passages on bread, the first and last mention of it are particularly insightful.**

WHAT IS THE WITNESS OF FIRST AND LAST MENTION?

The first time and the last time that a subject is mentioned in Scripture, the context often gives valuable insight on how God wants us to understand and apply the topic.

The first mention of bread in Scripture is Genesis 3:17-19.

"And unto Adam he said, Because thou hast hearkened unto the voice of thy wife, and hast eaten of the tree, of which I commanded thee, saying, Thou shalt not eat of it: cursed is the ground for thy sake; in sorrow shalt thou eat of it all the days of thy life;



Doré Bible Illustrations

"Thorns also and thistles shall it bring forth to thee; and thou shalt eat the herb of the field;

"In the sweat of thy face shalt thou eat bread, till thou return unto the ground; for out of it wast thou taken:

for dust thou art, and unto dust shalt thou return."

The last mention of bread in Scripture is found in II Thessalonians 3:6-13:

"Now we command you, brethren, in the name of our Lord Jesus Christ, that ye withdraw yourselves from every brother that walketh disorderly, and not after the tradition which he received of us.

"For yourselves know how ye ought to follow us: for we behaved not ourselves disorderly among you;

"Neither did we eat any man's bread for nought; but wrought with labour and travail night and day, that we might not be chargeable to any of you:

"Not because we have not power, but to make ourselves an ensample unto you to follow us.

"For even when we were with you, this we commanded you, that if any would not work, neither should he eat."

"For we hear that there are some which walk among you disorderly, working not at all, but are busybodies.

"Now them that are such we command and exhort by our Lord Jesus Christ, that with quietness they work, and eat their own bread."

"But ye, brethren, be not weary in well-doing."



Bread by labor

It is obvious from the contexts of the first and last mention of bread that bread is not to be received without labor. Thus, the picture that God wants us to have in our minds when we pray for daily bread is the labor that is required to provide for our daily needs.

HOW IS THE FIRST AND LAST MENTION CONSISTENT WITH GOD'S PRINCIPLE OF CONFIRMING TRUTH?

God has determined that "in the mouth of two or three witnesses," every truth shall be established. This principle was first given in Deuteronomy 17:6. It was then confirmed four times in the New Testament: Matthew 18:16, II Corinthians 13:1, I Timothy 5:19, and Hebrews 10:28.

Passages which contain the first and last mention of a key word can be significant witnesses of its true interpretation. Further witnesses would be other passages of Scripture which also contain the key word.

In the case of receiving bread by diligent labor, a third witness would be the following verse:

"He that tilleth his land shall be satisfied with bread: but he that followeth vain persons is void of understanding" (Proverbs 12:11).

An almost identical witness is given in Proverbs 28:19:

"He that tilleth his land shall have plenty of bread: but he that followeth after vain persons shall have poverty enough."

WHY DOES GOD REQUIRE LABOR IN ORDER TO RECEIVE DAILY BREAD?

It was in pride that Adam and Eve ate of the forbidden fruit in the garden of Eden. It is therefore for the purpose of breaking pride that God designed the need for daily bread with labor. This fact was confirmed by God when He explained the purpose of daily manna.

"And he humbled thee, and suffered thee to hunger, and fed thee with manna, which thou knewest not, neither did thy fathers know; that he might make thee know that man doth not live by bread only, but by every word that proceedeth out of the mouth of the Lord doth man live" (Deuteronomy 8:3).

One of the significances of this passage is that the full benefit from food cannot be experienced apart from strict obedience to the Word of God. A second witness to this passage is given by none other than our Lord Jesus Christ when He was tempted by Satan to make bread by His own will but not according to God's design. Satan appealed to pride when he tempted Jesus to prove that He was the Son of God by turning stones into bread.



Bible Art Series, Standard Publishing, Cincinnati

Jesus spent His forty days of fasting in the wilderness without any food in the barren wasteland of Palestine. To a hungry person, a rock could easily suggest a loaf of bread and increase the desire for food. At this precise point Satan tempted Jesus to take matters into His own hands.

"And when the tempter came to him, he said, If thou be the Son of God, command that these stones be made bread."

"But he answered and said, It is written, Man shall not live by bread alone, but by every word that proceedeth out of the mouth of God" (Matthew 4:3-4).

LEARN WORDS THAT DEFINE PRIDE, AND LEARN HOW WORKING FOR DAILY BREAD CONQUERS PRIDE.

Pride is the worst sin that man can commit. It is the sin that caused Satan to rise up against God and desire to be equal with Him. It is the sin that caused Adam and Eve to eat the forbidden fruit. It is the sin that caused Nebuchadnezzar to claim credit for building Babylon.

Because pride is the greatest of all sins, God judges it more swiftly than any other sin. He cast Satan and a third of the angels out of Heaven when they became proud. He brought judgment upon Adam and Eve when they rose up in pride. He forced Nebuchadnezzar to eat grass like an ox for his pride, and He brought instant death to king Herod when he spoke in pride.

God uses six Hebrew words to describe various aspects of pride. These words can be defined with the following terms:

PRIDE CAUSES US TO BE:

Self-centered - arrogance

Self-willed - presumption

Self-righteous - haughtiness

Self-reliant - conceit

Self-made - egotism

Self-seeking - coerciveness

1 HOW IS THE PRIDE OF SELF-CENTEREDNESS EXPRESSED IN ARROGANCE?

SYMPTOMS OF SELF-CENTEREDNESS:

- ☐ Do you pout when you do not get your own way?
- ☐ Do you refuse to eat when you are provoked?
- ☐ Do you punish loved ones by silence?
- ☐ Are you concerned with only your needs?

All of these symptoms were manifested in the life of one that God portrays as self-centered.

The name of this self-centered person was Ahab. He desired a vineyard that did not belong to him. He asked its owner, Naboth, to sell it to him, but Naboth was not able to sell the vineyard without violating inheritance laws.

Self-centered Ahab went home and pouted. He refused to eat and refused to talk until his self-seeking wife asked him what was bothering him.



Naboth refuses to compromise God's laws by selling his vineyard to King Ahab.

"And Ahab came into his house **heavy and displeased** because of the word which Naboth the Jezreelite had spoken to him: for he had said, I will not give thee the inheritance of my fathers. **And he laid him down upon his bed, and turned away his face, and would eat no bread.**

"But Jezebel his wife came to him, and said unto him, Why is thy spirit so sad, that thou eatest no bread?

"And he said unto her, Because I spake unto Naboth the Jezreelite, and said unto him, Give me thy vineyard for money; or else, if it please thee, I will give thee another vineyard for it: and he answered, I will not give thee my vineyard.

"And Jezebel his wife said unto him, Dost thou now govern the kingdom of Israel? **arise, and eat bread, and let thine heart be merry: I will give thee the vineyard of Naboth the Jezreelite**" (1 Kings 21:4-7).

Notice the prominent place that food has in this account. Ahab desired food from a vineyard that he could not rightly own. When he could not get it, he rejected the food that God did provide for him and became a willing participant in an evil scheme to get what he wanted.

DEFINITION OF SELF-CENTEREDNESS:

Self-centeredness is defined by the first Hebrew word for pride: גָּאוֹן (gaw-OHN). In its negative sense, it involves arrogance. The word carries with it the idea of being inflated or swelled with an exaggerated estimation of one's own importance. A self-centered person is engrossed in himself and his own affairs. He has no interest in the needs and circumstances of others, and by his actions and insensitivity he unknowingly hurts and offends those who are closest to him.

HOW CAN DAILY BREAD CONQUER SELF-CENTEREDNESS?



H. Armstrong Roberts

The petition that we are to pray: **"Give us this day our daily bread,"** requires an awareness of the physical needs of others, not just our own.

It also forces us to be thankful for those whom God uses to provide our daily bread.

PROJECTS

Gratefulness for a meal

- ☐ 1. Next time you do not get your own way and find yourself pouting, stop focusing on what you did not get, and begin to delight in the things that God has provided for you. Begin with the health that God has allowed you to have and the ability to enjoy daily bread.

Near the end of his life, the multi-billionaire Howard Hughes made the statement, "I would give all the money I possess in exchange for the ability to enjoy one meal."

Gratefulness for food providers

- ☐ 2. During your next meal think of at least five people who are responsible for the food you are eating, and thank God for them. (i.e. the farmer, the truckers, the grocer, the stock boy, the checkout clerk, the health inspectors, the ones who prepared it, your employer, etc.)

Gratefulness through giving

- ☐ 3. The opposite of self-centeredness is genuine love, or giving to the basic needs of others. Demonstrate gratefulness by giving food to someone who needs it.

2 HOW IS THE PRIDE OF SELF-WILL EXPRESSED IN PRESUMPTION?

SYMPTOMS OF SELF-WILL:

- ☐ Have you been accused of being stubborn?
- ☐ Have you eaten food that you knew did not belong to you?
- ☐ Do you deliberately eat forbidden food?
- ☐ Do you fear man or God in what you eat?
- ☐ Are you addicted to any food?

King Saul was a self-willed man. Physically he was head and shoulders above every man in Israel. Before he was chosen by God to be the king, he was "little in his own eyes."

However, after being anointed king, he became overly concerned about what people thought of him.

When his son Jonathan conquered an outpost of enemy soldiers, Saul took the credit for it. When Samuel said that he would come in seven days to present a burnt offering and a peace offering to the Lord, Saul became impatient and carried out the ceremony himself before Samuel came, despite the fact that this duty had been forbidden to anyone but the priest. As soon as the burnt offering had been made, Samuel arrived.



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When Samuel turned away from Saul, Saul tried to restrain him and ripped his mantle. Whereupon Samuel said, "The Lord hath rent the kingdom of Israel from thee this day, and hath given it to an neighbour of thine, that is better [more humble] than thou" (1 Samuel 15:28).

Samuel said to Saul, "Thou hast done foolishly: thou hast not kept the commandment of the Lord thy God, which he commanded thee: for now would the Lord have established thy kingdom upon Israel forever" (I Samuel 13:13).

A self-willed person does not listen to rebuke. He continues doing what he thinks is best. When Samuel instructed Saul to utterly destroy the Amalekites and all their possessions, Saul decided to do it his own way. When he returned from the battle and assured Samuel that he had obeyed the Lord's commandments, Samuel said:

"What meaneth then this bleating of the sheep in mine ears, and the lowing of the oxen which I hear?"

"And Saul said, They have brought them from the Amalekites: for the people spared the best of the sheep and of the oxen, to sacrifice unto the Lord thy God; and the rest we have utterly destroyed.

"Then Samuel said unto Saul, Stay, and I will tell thee what the Lord hath said to me this night. And he said unto him, Say on.

"And Samuel said, When thou wast little in thine own sight, wast thou not made the head of the tribes of Israel, and the Lord anointed thee king over Israel?"

"And the Lord sent thee on a journey, and said, Go and utterly destroy the sinners the Amalekites, and fight against them until they be consumed.

"Wherefore then didst thou not obey the voice of the Lord, but didst fly upon the spoil, and didst evil in the sight of the Lord?"

"And Saul said unto Samuel, Yea, I have obeyed the voice of the Lord, and have gone the way which the Lord sent me, and have brought Agag the king of Amalek, and have utterly destroyed the Amalekites.

"But the people took of the spoil, sheep and oxen, the chief of the things which should have been utterly destroyed, to sacrifice unto the Lord thy God in Gilgal.

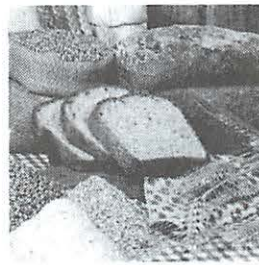
"And Samuel said, Hath the Lord as great delight in burnt offerings and sacrifices, as in obeying the voice of the Lord? Behold, to obey is better than sacrifice, and to hearken than the fat of rams.

"For rebellion is as the sin of witchcraft, and stubbornness is as iniquity and idolatry. Because thou hast rejected the word of the Lord, he hath also rejected thee from being king" (I Samuel 15:14–23).

DEFINITION OF SELF-WILL:

The second Hebrew word that is translated pride is זָדֹנָה (zaw-DONE). It means "to act presumptuously; to be headstrong, overconfident, unreasonable, blinded to counsel by one's own desires. A self-willed person is rash; he follows his own inclinations and will carry out only those directions that do not interfere with his own plans. He will also try to offer partial obedience for full obedience.

HOW CAN DAILY BREAD CONQUER SELF-WILL?



H. Armstrong Roberts

The very nature of daily bread establishes God-given limitations. When these limitations are disregarded, physical reproofs result which reinforce the need to submit our will to God's will.

PROJECTS

Discipline through denial

- ☐ 1. List the foods that you enjoy eating, and set a period of time during which you will go without them. Base this project on the instruction of Paul that all foods may be lawful, but that you will not be brought under the power of any. (See I Corinthians 6:12.)

Discipline through restrictions

- ☐ 2. Identify things you eat that are harmful for your physical health. Replace these items with food that you know is wholesome. Base this project on the Scriptural teaching of honoring your body as the temple of the Holy Spirit. (See I Corinthians 3:17.)

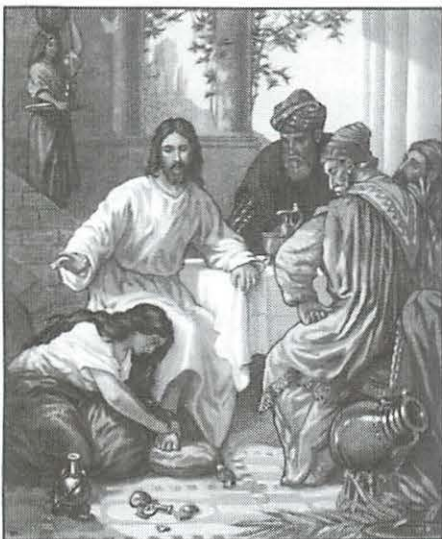
Discipline through fasting

- ☐ 3. Set aside a period of time during which you give yourself to fasting. Give the food or money that you would have used to somebody in need. Base this project on the teaching of Isaiah 58:6–7: "Is not this the fast that I have chosen . . . to deal thy bread to the hungry . . . ?"

3 HOW IS THE PRIDE OF SELF-RIGHTEOUSNESS EXPRESSED IN HAUGHTINESS?

SYMPTOMS OF SELF-RIGHTEOUSNESS:

- ☐ Does it disturb you to hear a rival praised?
- ☐ Do you think that you are somebody important?
- ☐ Do you despise people who are not like you?
- ☐ Are you quick to condemn faults in others?
- ☐ Do you praise yourself to others?



Bible Art Series, Standard Publishing, Cincinnati

The self-righteous Pharisees looked down with scorn upon a repentant sinner who anointed Jesus' feet, but Jesus commended her and reproved them.

The Pharisees in the days of Jesus were the classic examples of prideful, self-righteous people. Jesus denounced them as being worse than the publicans and sinners whom they took great pains to avoid:

Observe the harsh denunciation which the self-righteous Pharisees received from Jesus, in the following passage:

"But woe unto you, scribes and Pharisees, hypocrites! for ye shut up the kingdom of heaven against men: for ye neither go in yourselves, neither suffer ye them that are entering to go in.

"Woe unto you, scribes and Pharisees, hypocrites! for ye devour widows' houses, and for a pretence make long prayer: therefore ye shall receive the greater damnation.

"Woe unto you, scribes and Pharisees, hypocrites! for ye compass sea and land to make one proselyte, and when he is made, ye make him twofold more the child of hell than yourselves.

"Woe unto you, ye blind guides. . ."
(See Matthew 23.)

DEFINITION OF SELF-RIGHTEOUSNESS:

The third Hebrew word translated *pride* is גִּבּוֹהַ (GO-bah). This word defines the haughtiness of a self-righteous person. It means "having a high and lofty opinion of one's own self with equally strong contempt for others who do not measure up to self-imposed standards." The chief characteristic of a self-righteous person is hypocrisy, accompanied by spiritual blindness, which is misguided zeal for accomplishments that will feed its own pride.

HOW CAN DAILY BREAD CONQUER SELF-RIGHTEOUSNESS?



H. Armstrong Roberts

A self-righteous person will conform to accepted standards while inwardly rebelling against God's principles. The need for daily bread gives daily opportunity to engage in menial tasks which are necessary both for survival and for serving others.

PROJECTS

Deference through the order of being served

- ☐ 1. When you are at social event, take the last place in the serving line. The younger people should always let the older people go first. The Pharisees expected to be served first; thus, they went to the head of the line. The Pharisees assumed they were the important guests. They conveyed the attitude that they were honoring their host by simply being there.

Deference through the seating position

- ☐ 2. Do not seek the best seats at the table. Often there are seats that are honored positions such as the head of the table or the seat next to an honored guest. Jesus condemned the Pharisees for desiring the uppermost seats at feasts, in Matthew 23:6.

Deference through menial tasks

- ☐ 3. Volunteer to be a part of the preparation and cleanup of a meal, as well as serving the guests who come. The Pharisees expected to be served and failed to wash the feet of Jesus or anoint his head, as was the custom. Mary took the initiative and was praised by Jesus.

Deference through conversation

- ☐ 4. Be careful not to dominate the conversation at the table. Design questions that you can ask at mealtimes in order to encourage others to share their thoughts and ideas. Show genuine interest in them by the way you listen to what they are saying.

4 HOW IS THE PRIDE OF SELF-RELIANCE EXPRESSED IN CONCEIT?

SYMPTOMS OF SELF-RELIANCE:

- ☐ Do you pause before each meal to pray and thank God for the food He has provided for you?
- ☐ Are you embarrassed to bow your head in public and thank God for your food?
- ☐ Do you also thank God for the people who helped make the meal possible?

King Belshazzar was a self-reliant person—his heart was lifted up with pride against the God of Heaven and earth. He flattered himself with the vain notion that he was secure in his surroundings. He demonstrated the characteristics of a self-reliant person by praising the gods which he had made—since he made them, he controlled them.

His idea of using the gods to achieve his own pleasures carried over to the God of Heaven.



Bible Art Series, Standard Publishing, Cincinnati

While Belshazzar was drinking to his gods with the dedicated vessels of the temple, God weighed his kingdom and destroyed him.

“Belshazzar the king made a great feast to a thousand of his lords, and drank wine before the thousand.

“Belshazzar, while he tasted the wine, commanded to bring the golden and silver vessels which his father Nebuchadnezzar had taken out of the temple which was in Jerusalem; that the king, and his princes, his wives, and his concubines, might drink therein.

“Then they brought the golden vessels that were taken out of the temple of the house of God which was at Jerusalem; and the king, and his princes, his wives, and his concubines, drank in them.

“They drank wine, and praised the gods of gold, and of silver, of brass, of iron, of wood, and of stone” (Daniel 5:1–4).

DEFINITION OF SELF-RELIANCE:

The fourth Hebrew word that defines pride is נָתַן (gay-VAW). It means “**lifting up oneself; trusting confidently in one’s own ability and judgment; having a lofty and vain conception of personal capabilities, judgment, or resources. Self-reliance is the attitude that God and others are not necessary.**”

While **self-righteousness focuses on moral superiority**, self-reliance emphasizes superior skills and abilities.

HOW CAN DAILY BREAD CONQUER SELF-RELIANCE?



H. Armstrong Roberts

The primary cause of self-reliance is an abundance of food and provisions. The rich farmer told his soul to take its ease because he had a large supply of goods laid up for many years. The nation of Israel became cold toward the Lord when they had possessions and crops in abundance.

PROJECTS

Reverence through the fear of God

- ☐ 1. Learn to have a fear of God’s judgment upon self-reliant people, by reading Deuteronomy 28:15–68. Notice the verses that relate to daily food.

“Because thou servedst not the Lord thy God with joyfulness, and with gladness of heart, for the abundance of all things;

“Therefore shalt thou serve thine enemies which the Lord shall send against thee, in hunger, and in thirst . . .” (Deuteronomy 28:47–48).

Reverence through the cycles of life

- ☐ 2. Learn the secret of contentment in times of abounding and in times of suffering need. Read Chapter 8, of *Men's Manual*, Volume 2. Realize that God will send times of plenty and times of poverty in order to keep us dependent upon Him for daily food. The writer of Proverbs 30 understood this truth when he prayed: "... Give me neither poverty nor riches; feed me with food convenient for me: [Hebrew: "of my daily allowance"] Lest I be full, and deny thee, and say, Who is the Lord? [in self-reliant conceit] or lest I be poor, and steal, and take the name of my God in vain" (Proverbs 30:8-9).

Reverence through dedication

- ☐ 3. Conquer self-reliance by dedicating all of your possessions to God and viewing yourself as simply a steward of what God owns. The best way to avoid self-reliance is to be able to remind yourself daily that "the things I have do not belong to me, and I must give an account to God for the way I use them and care for them, including not wasting food."

5 HOW IS THE PRIDE OF CLAIMING TO BE SELF-MADE EXPRESSED IN EGOTISM?

SYMPTOMS OF CLAIMING TO BE SELF-MADE:

- ☐ Do you boast about your accomplishments?
- ☐ Do you take credit for the work of others?
- ☐ Do you look forward to the praise of people?
- ☐ Do you think that you are somebody important?
- ☐ Would others say that you are a perfectionist?
- ☐ Do you keep scrupulous records of your achievements so that you can glory in them?

In our day it is considered a compliment to hear someone say of someone else, "He is a self-made man." The implication being given is that this man gained his present status all by himself. To communicate such an idea is obviously erroneous because it totally overlooks the hundreds of people who sacrificed to make that person successful. He did not make himself in the womb, nor bring himself into the world, nor take care of himself during the early years of his life. He did not provide all the advantages he enjoyed during his growing up years,



Detail of a painting by M. Bardin, after Unger

The city of Babylon was an amazing architectural achievement. Its hanging gardens became one of the seven wonders of the world.

nor did he teach himself all he knows. A person who communicates pride for all of these gifts will experience sure judgment from God and from others.

Nebuchadnezzar was the greatest world ruler who ever lived. His word was the law. His vast empire was governed from the city of Babylon. Several rulers before him had worked on this city; he was the one to bring it to its completion and splendor. This accomplishment gave him great personal satisfaction and caused him to rise up in prideful boasting.

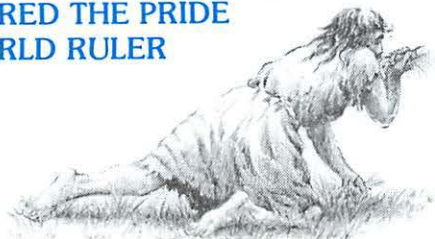


Notice the egotism in Nebuchadnezzar's boastings when he walked out one day and said the following:

"... Is not this great Babylon, that I have built for the house of the kingdom by the might of my power, and for the honour of my majesty?" (Daniel 4:30).

Swift judgment came to Nebuchadnezzar because of his pride. While his egotistical words were still in his mouth, he heard God speak to him from Heaven reminding him of an earlier warning. "The same hour was the thing fulfilled upon Nebuchadnezzar: and he was driven from men, and did eat grass as oxen . . ." (Daniel 4:33).

HOW THE DISCIPLINE OF "DAILY BREAD" CONQUERED THE PRIDE OF A WORLD RULER



It is significant to note that oxen eat their bread on a daily basis. Thus, the greatest world ruler of all time was required to eat daily bread so he could learn humility. He learned well:

"I Nebuchadnezzar lifted up mine eyes unto heaven, and mine understanding returned unto me, and I blessed the most High, and I praised and honoured him that liveth for ever, whose dominion is an everlasting dominion, and his kingdom is from generation to generation:

"And all the inhabitants of the earth are reputed as nothing: and he doeth according to his will in the army of heaven, and among the inhabitants of the earth: and none can stay his hand, or say unto him, What doest thou? . . .

"Now I Nebuchadnezzar praise and extol and honour the King of heaven, all whose works are truth, and his ways judgment: and those that walk in pride he is able to abase" (Daniel 4:34–35, 37).

DEFINITION OF CLAIMING TO BE SELF-MADE:

The fifth word for pride is the Hebrew word שָׁחַץ (SHAKH-ats). It means "to strut," or "to be haughty" and comes from an idiom in Hebrew that means lion.

When a person claims to be self-made, he is saying that he has achieved success unaided by others. Furthermore, he is communicating the attitude that he does not need anyone else and that there is no need for further personal improvement.

Self-righteousness focuses on moral superiority, and self-reliance focuses on superior skills and abilities, but claiming to be self-made focuses on being a superior person with superior accomplishments.

HOW CAN DAILY BREAD CONQUER EGOTISM?



H. Armstrong Roberts

A full stomach and abundant provisions reinforce an attitude of egotism. By learning to suffer hunger and to distribute to the basic needs of other Christians, the problem of egotism is directly attacked.

PROJECTS

Humility through example

- ☐ 1. Restrict your diet for one day to alfalfa sprouts. During that day, learn the spirit of humility that Nebuchadnezzar experienced by memorizing Daniel 4:34–37. By quoting these verses back to God as a personal prayer, you should develop an understanding of what genuine humility involves.

Humility through examination

- ☐ 2. Take God's test for pride: Simply ask yourself the question, "Do I think that I am somebody important [in myself]?" According to Galatians 6:3, by that very thought, you are deceiving yourself.

Humility through prayer

- ☐ 3. Before each meal, acknowledge to God how dependent you are on Him and on the work that others have done for your life. Bow your head in public restaurants and thank God for what He and others have done for you.

Humility through listening

- ☐ 4. Conquer the tendency to boast about your achievements by designing questions that will allow others to tell of their activities. Show genuine interest by the way you listen.

6 HOW IS THE PRIDE OF SELF-SEEKING EXPRESSED IN COERCIVENESS?

SYMPTOMS OF SELF-SEEKING:

- ☐ Do you try to convince others to do things that will benefit only you?
- ☐ Do you view your employment as simply a stepping-stone to achieving your own ambitions?

- ☐ When you are asked to do something, is your first thought, "How will this benefit me?"
- ☐ Do you evaluate other people on the basis of how they can benefit your life?

One of God's classic testimonies of a self-seeker is Haman. He did all he could to gain the favor of King Ahasuerus. However, Haman's hidden agenda was to require everyone to bow down to him.

When Esther's uncle refused to bow, Haman did what a self-seeker naturally does. He devised a way to get rid of those who would not cooperate with his plans.

However, through the fasting of Esther and then two well-planned meals, the schemes of Haman were defeated.



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The honor that Haman sought for himself he was forced to give to the one he hated. Rather than being properly humbled, he was humiliated.

In the process of Haman's self-seeking, he was unconcerned about the people he would hurt. Like most self-seekers, he was not aware that the people he would hurt were related to other people who could hurt him.

The one whom Haman hated (Mordecai) instructed Queen Esther to expose Haman's wicked plot to the King. Esther and her maidens fasted three days before she made her appeal.

DEFINITION OF SELF-SEEKING:

The sixth Hebrew word for pride is רִכְסָה (RO-kes). It means a snare, as of tied meshes over a pit in which to catch people. Self-seeking pride pursues only personal goals and ambitions and uses other people to accomplish them.



American Museum of Photography

Esther planned two meals for the King and Haman. At the second meal, she exposed Haman's wicked plot. The King commanded him to be killed.

HOW CAN DAILY BREAD CONQUER SELF-SEEKING?



H. Armstrong Roberts

The self-seeking person will give little regard to the limitations God places upon his diet. The physical consequences which then normally result will usually force such a person to re-evaluate the guidelines God has established for daily bread.

PROJECTS

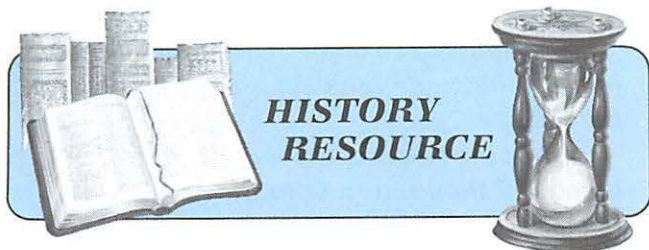
Generosity through serving

- ☐ 1. Rather than trying to use other people to reach your ambitions, dedicate yourself to helping them reach God's goals for their lives. This is God's way to greatness (See Matthew 20:26-28.)

Generosity through new priorities

- ☐ 2. Identify hobbies and activities which are consuming time and money but are not gaining anything of eternal value. Eliminate from your life these weights, which are hindering you in your spiritual race. (See Hebrews 12:1.) As you lay them aside, rearrange your priorities to more effectively serve the Lord and others.

Date completed _____ Evaluation _____



HISTORY RESOURCE

HOW HAS MAN'S REJECTION OF DAILY BREAD RESULTED IN A QUEST FOR WHITE BREAD?



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The ruins of Pompeii. In the background is Mount Vesuvius that buried this once thriving city in which white bread was sold in the markets.

In 1982, an experienced American doctor arrived at an East African hospital to help the nationals care for their sick. Soon a patient who had extreme abdominal pain was brought in to the clinic. Based on his many years of experience, the doctor quickly detected what were to him the obvious symptoms of appendicitis.

The doctor immediately instructed the national workers who were assisting him to prepare the room and the patient for an appendectomy. The nationals objected, saying, "If you operate on him for appendicitis, you will be the laughing stock of our community. Our people do not get appendicitis. Only Americans get appendicitis."

What they were saying was true. Among these East Africans, appendicitis was rare because their diet consisted of high-fiber foods, especially whole-grain breads.

The doctor re-examined the patient, whose condition was now steadily deteriorating, then turned to the nationals and firmly stated, "You may be right about your people not getting appendicitis,

but this man has all the classic symptoms of that condition. If he does not improve in an hour, I am going to operate."

An hour later the patient was in even greater distress, so the doctor performed the operation. In that operation he removed a highly inflamed appendix that was just ready to burst. The nationals were amazed. How could one of their villagers have contracted this Western disease?

The mystery was solved when the patient was later questioned. Six months earlier he had traveled to the big city and had begun living on the diet of the rich Americans: white bread, fatty foods, and excessive amounts of sugar. These low-fiber foods had caused constipation which resulted in appendicitis.



Life and Customs in Jesus' Time, John L. Giff, Standard Publishing

God designed bread as the staff of life. However, it fulfills its maximum potential only when it is properly ground, prepared, baked, and eaten on a daily basis.

God designed grain as one of the most complete foods. The balance within the grain is vital for the health of those who eat it.

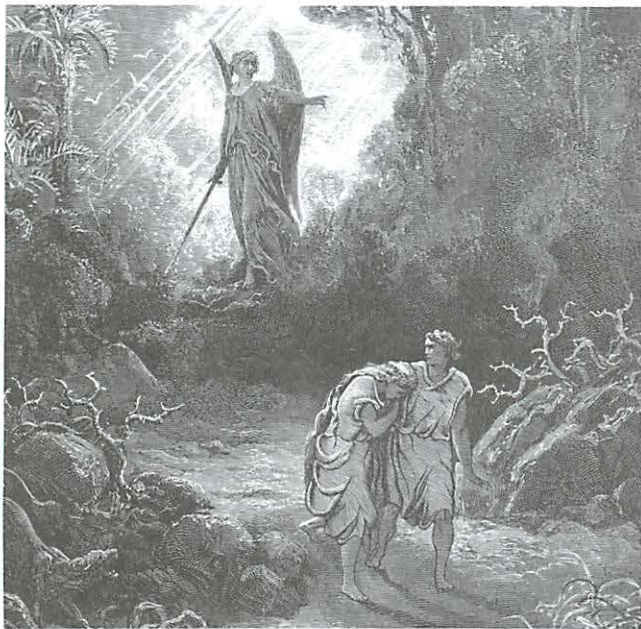
When the whole grain is ground into flour and baked, the resulting bread fulfills the functions for which God intended it. If the grain is coarsely ground, the bread will have a rough texture. If the grain is finely ground, the bread will have a smooth texture.

In either case, however, whole-grain bread will have a brownish tint to it. The desire to eliminate the dark color and rough texture has motivated bakers over the centuries to search for ways to get smoother, softer, whiter bread.

When steel rolling mills were introduced in America in 1874 for the purpose of producing white flour, the grain was crushed rather than ground. The germ and bran were flattened and then sifted out, leaving only the starch for white flour. Thus the dream of centuries was at last achieved: white bread for the multitudes.

Those who eat it think they are receiving daily bread; instead they are eating a judgment to their own health.

1 GOD DESIGNED "DAILY BREAD" TO REMIND US OF OUR DEPENDENCE UPON HIM.



Doré Bible Illustrations

Before the fall, Adam and Eve had an abundance and a variety of food which was immediately available to them. When they sinned against God, the ground was cursed for their sake, and thereafter, they had to work for daily food by the sweat of their brow. (See Genesis 3:17–19.)

Adam and Eve desired to be independent of God and self-sufficient. This is what caused them to sin. (See Genesis 3:5–6.) In order to remind us that we are totally dependent upon God, He cursed the ground so that we would be forced to look to Him for our daily bread.

“... Cursed is the ground for thy sake; in sorrow shalt thou eat of it all the days of thy life;

“Thorns also and thistles shall it bring forth to thee; and thou shalt eat the herb of the field;

“In the sweat of thy face shalt thou eat bread, till thou return unto the ground . . .”
(Genesis 3:17–19).

2 GOD CONFIRMED THE NECESSITY OF DAILY DEPENDENCE BY DESIGNING MANNA.

When God led the nation of Israel out of the bondage of Egypt, He assumed the full responsibility for their daily provisions. They were in the wilderness a very short time before they became hungry.

Instead of crying out to God for their daily bread, “. . . the whole congregation . . . murmured against Moses and Aaron . . . [and] said unto them, Would to God we had died by the hand of the Lord in the land of Egypt, *when we sat by the flesh pots, and when we did eat bread to the full . . .*” (Exodus 16:2–3).

God heard their murmuring and provided manna for their daily sustenance. The design and “shelf life” of manna confirms God’s intention that we look to Him daily for our food.

“And when the dew that lay was gone up, behold, upon the face of the wilderness there lay a small round thing, as small as the hoar frost on the ground.

“And when the children of Israel saw it, they said one to another, It is manna: for they wist not what it was. And Moses said unto them, This is the bread which the Lord hath given you to eat” (Exodus 16:14–15).



The coriander plant and seed

Funk and Wagnalls New Encyclopedia



My Picture Bible, Victor Books

Gathering manna was a family event each day.

The term, **manna**, is from a Hebrew word meaning "What is it?" The Biblical description of manna indicates that it was pleasant in appearance, odor, and taste. Its light brown color is compared to coriander seed. (See Exodus 16:31.) Coriander seed is also light brown and fragrant and has a pleasing taste. Manna had a natural sweetness that made it taste like wafers made with honey.

One of the adjectives used to describe the taste of manna is "fresh." (See Numbers 11:8.) This word comes from a Hebrew root meaning "juice" and is translated "moisture" in Psalm 32:4.

God designed manna in such a way that it had to be eaten on the day it was gathered; otherwise it would spoil.

In spite of God's instructions, "... some of them left of it until the morning, and it bred worms, and stank..." (Exodus 16:20).

If the manna had not spoiled, the nation of Israel would certainly not have gathered it fresh every day. It is this desire for longer-lasting bread that has produced white bread.

3 GOD'S DESIGN WAS IGNORED BY MAN'S REMOVING SPOILING FACTORS FROM FLOUR.

Whole grain spoils and becomes moldy in a relatively short period of time. By taking away the germ of the wheat, which contains the oil, and the outer covering, which contains the fiber, the wheat flour can be stored for longer periods of time without its turning rancid.

The flour's ability to be stored, however, is at the expense of removing about twenty-five vitamins, minerals, and proteins. The germ is one of the richest sources of vitamin E, which is necessary for the absorption of vitamin A and for general vitality. Experiments show that a lack of vitamin E can lead to heart disease.

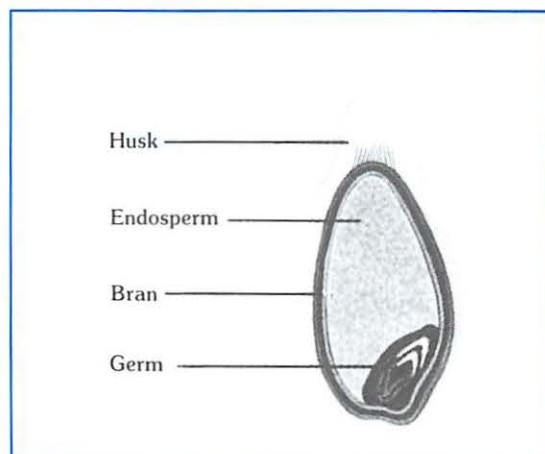


H. Armstrong Roberts

Wheat germ also contains vitamin B and high-quality proteins which are readily used in the body for vital processes.

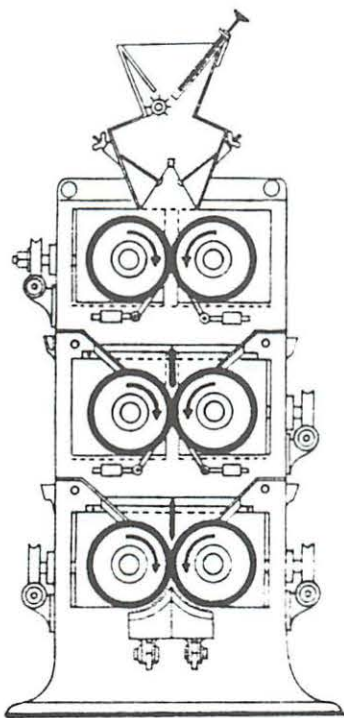


Bread made from whole grain is the staff of life.



©World Book, Inc.

Cross section of a kernel of wheat



Flour for Man's Bread: A History of Milling.
John Stork & Walter Teague, Univ. of Minnesota Press

The first workable roller assembly was invented by Jakob Sulzberger in 1834. The grain passed between three pairs of corrugated cast-iron rollers and came out "very hot and flattened out like a sheet of paper."

The flour from which white bread is made is depleted far more than the average consumer realizes. Even the so-called "vitamin enriched bread" is misleading. Four vitamins are returned to the flour in exchange for the twenty that were removed.

In addition to the loss of essential vitamins, the amounts of some important minerals are substantially reduced in white bread. The following results are taken from a study at the University of California College of Agriculture in June of 1943.

Minerals	Lost in Roller Milling
manganese	about 98 percent
iron	about 80 percent
magnesium	about 75 percent
phosphorus	about 70 percent
copper	about 65 percent
calcium	about 50 percent
potassium	about 50 percent
Vitamins	Lost in Roller Milling
thiamine	about 80 percent
niacin	about 75 percent
riboflavin	about 65 percent
pantothenic acid	about 50 percent
pyridoxine	about 50 percent

4 THROUGHOUT HISTORY THERE HAS BEEN A QUEST FOR WHITE BREAD.

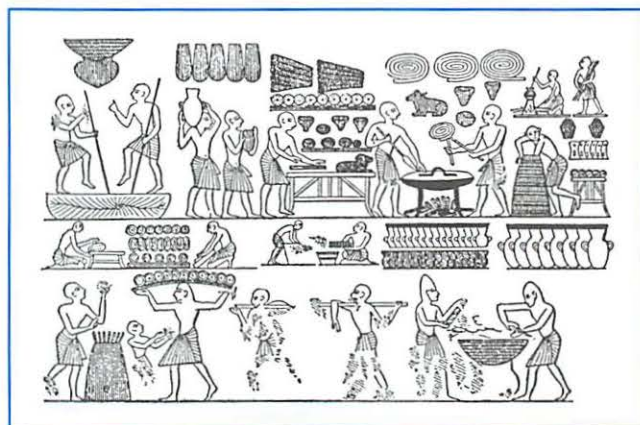
The ancient Egyptians had some limited success in producing a lighter colored flour some 3,000 years ago. They discovered that certain varieties of soft wheat could be milled into a more refined flour than hard wheat.

We know from drawings inside the pyramids that baking was considered to be a visual art as the bakers along the Nile made light, puffy loaves in hundreds of fanciful forms: round, cubical, conical, braided, and in the shapes of pyramids and even animals. They worked hard at grinding and sifting their flour to make it finer so that the bread would rise better, thus enabling them to create these artistic forms.



Flour for Man's Bread: A History of Milling, John Stork & Walter Teague, Univ. of Minnesota Press

This detail from an Egyptian tomb painting shows some of the delicacies that the children of Israel lusted after. Notice the breads baked in the shape of pyramids at the far right.

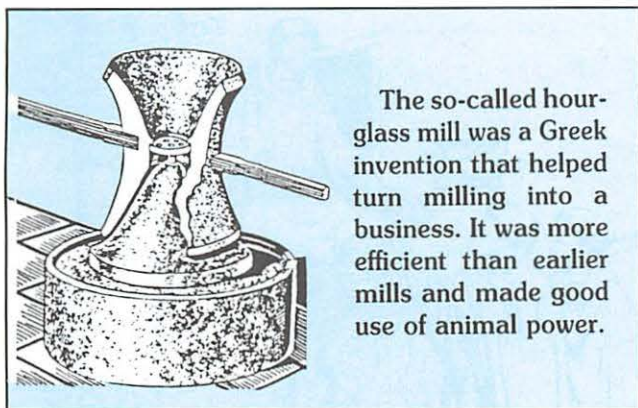


Six Thousand Years of Bread: Its Holy and Unholy History, E.H. Jacob, Doubleday

This painting from the tomb of the Pharaoh named Ramses shows what a sophisticated art baking was during the time of the Exodus.

The Greeks made a distinction between whole-grain flour and sifted flour as early as the fifth century B.C. By 330 B.C., they also had a separate Greek word for bran (πίτυρον).

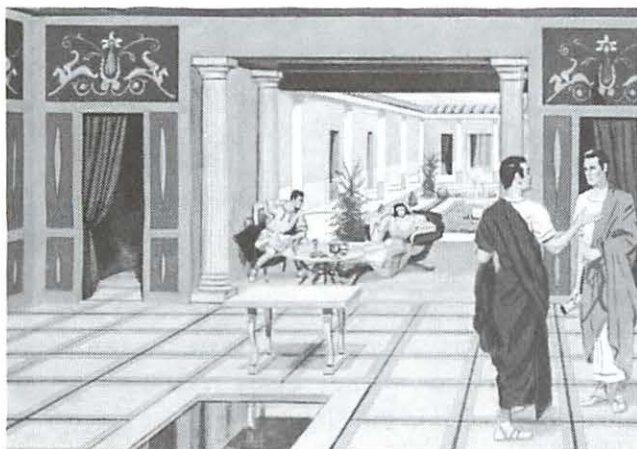
In first century Rome, lighter colored flour became a popular commodity. The Roman millers had discovered how conditioning the grain with salt water prior to milling it would produce a more refined product. They also sifted the flour to separate the bran from it.



The so-called hour-glass mill was a Greek invention that helped turn milling into a business. It was more efficient than earlier mills and made good use of animal power.

Flour for Man's Bread: A History of Milling, John Storck & Walter Teague, Univ. of Minnesota Press

It was in Rome where the color of one's bread first took on cultural significance. Prior to this time refined flour was essentially a novelty reserved for the very rich and virtually unobtainable by the average person.



©World Book, Inc.

In first century Rome "to know the color of one's bread was the equivalent of knowing one's place in society: the lower one's place on the social ladder, the darker one's bread."

During the Middle Ages there were bakers' guilds which specialized in white bread. These guilds began during the days of the Roman empire. Laws were established to protect the bakers from unfair competition and the people from dishonest bakers.

Following the French Revolution, grain was in very short supply. The government of France then instituted price controls so that all bread would cost the same. Then in the name of equality, the flour sieves of the millers and bakers were confiscated so they could no longer make the whiter breads.

Shortly thereafter, the *dole* was established—every citizen received free bread daily from the government. However, by 1795, the shortage of

grain had become so severe that there was practically no bread to be had at any price.



Six Thousand Years of Bread: Its Holy and Unholy History, E.H. Jacob, Doubleday

On October 5, 1789, thousands of angry Parisian women marched from Paris to Versailles. Enraged by the lack of flour in the city, they had become convinced that the king was hoarding flour and were determined to get some for their families. The truth was that the royal family had no flour either.

Throughout this period the desire and demand for white bread never diminished. In fact, one historian wrote, "Earlier, white wheat bread was the bread of the rich; the Revolution made it the bread of everybody."

5 WHEN BREAD-MAKING IS REMOVED FROM THE HOME, THERE IS DANGER OF CORRUPTION.

Our present milling techniques have made it possible to produce white flour inexpensively and to make white bread available for everyone. However, in the process of making this bread, basic principles have been violated.

Isaiah the prophet makes a significant reference to the milling of grain in Isaiah 28:27–29. In this passage he sets forth two guiding principles: "For the fitches are not threshed with a threshing instrument, neither is a cart wheel turned about upon the cummin; but the fitches are beaten out with a staff, and the cummin with a rod. Bread corn is bruised; because he will not ever be threshing it, nor break it with the wheel of his cart, nor bruise it with his horsemen. This also cometh forth from the Lord of hosts, which is wonderful in counsel, and excellent in working."

The first principle of milling is to use proper equipment so as not to damage the grain. A closely related second principle is simply not to over-process the grain.

The word *bruise* in verse 28 refers not to threshing, but to grinding, which is a process of breaking something into tiny pieces. The word *break* in this verse, however, translates a Hebrew term meaning “to destroy or crush the life out of.” In order to make bread, the wheat needs to be ground, but it must not be threshed or ground beyond a certain point.



Breads, Manna from Heaven, Eileen Gaden, Christian Herald Books

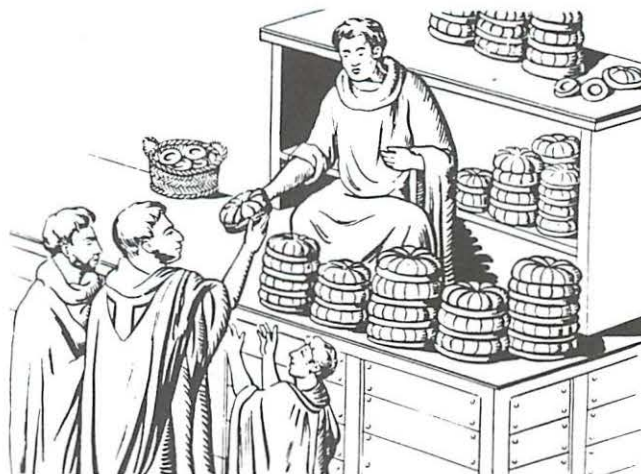
The edge runner, an early type of mill, fell into disuse because people learned that it tended to crush rather than grind the grain.

Throughout history the desire for white bread has motivated men to violate both of these principles either through ignorance or through deliberate disobedience.

A little over a century before Jesus was born, the Roman government initiated a program that had the eventual result of removing the milling and baking processes from the homes of its citizens.

Rome used this famous policy of “bread and circuses” to keep the masses from rioting. The “bread” aspect began with the selling of grain at half-price, eventually leading to the free distribution of grain in 58 B.C. Barely a dozen years later, well over half the city’s free population of 600,000 was on the dole.

Roman bakers and citizens alike sought for an ever-whiter bread. The historian Pliny recorded what they did to achieve it: “A most singular fact—chalk is mixed with the meal, which upon becoming well-incorporated with it, adds very materially to both the whiteness and the shortness of the mixture.” It must have also added to the poor digestion of the Romans!



Flour for Man's Bread: A History of Milling, John Storck & Walter Teague, Univ. of Minnesota Press

This scene from a wall painting in Pompeii shows a bake shop and the typical bread of the day. Bakers were required to mark their bread so that any bad bread could be traced to its source.

Toward the end of the eighteenth century it was discovered that *alum*, a salt compound that is sometimes used as an emetic, could be used to make flour whiter. Soon it became commonplace for millers to mix in alum, even though many doctors protested. This practice was not discontinued until the middle of the nineteenth century when methods of detecting the alum content of flour became generally available.

Since that time, millers have used a variety of bleaching agents which oxidize the yellow carotinoid pigments. For twenty-five years nearly all of the white flour milled in the United States was bleached with a chemical called nitrogen trichloride.

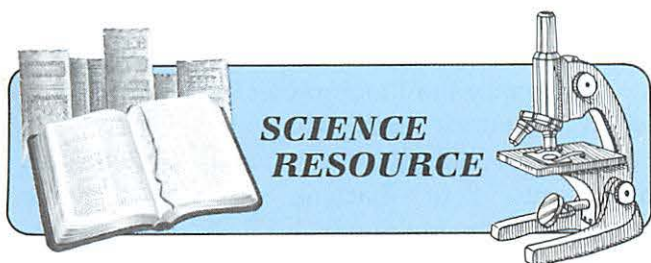
A prominent British physician did research using flour bleached in this manner as the primary diet of dogs. Within one to two weeks, the animals began to suffer from “running fits,” some of which were so violent as to be fatal.

The sale of nitrogen trichloride in the United States has now been banned by the Food and Drug Administration, but millers are now using chlorine dioxide, which is reportedly an even more powerful bleaching agent.

PROJECT

Plan a family field trip to your local grocery store to examine the labels on various bread products. Compare the number of chemicals added to enrich and preserve bread, and select the bread which is the most nutritious.

Date completed _____ Evaluation _____



SCIENCE RESOURCE

HOW DOES RAPID DETERIORATION OF MILLED WHEAT MOTIVATE US TO SEEK DAILY BREAD?



© 1972 Anna Thomas Vegetarian Epicure

In the same way that God designed manna to “self destruct” at the end of each day, He created wheat to deteriorate rapidly once it has been milled. According to God’s design, we must either eat fresh bread or fail to receive the fullest nutritional benefit which can come from it.

The more we learn about the chemical changes that take place in bread, the more we understand the wisdom of God’s instruction to pray for daily bread rather than weekly or monthly bread.

1 GRAIN BEGINS TO DETERIORATE AS SOON AS ITS PROTECTIVE HULL IS CRACKED.

In 1986 farmers around the world grew about thirteen billion bushels of wheat. That is enough wheat to fill a freight train of box cars so long that it would reach around the world twice.

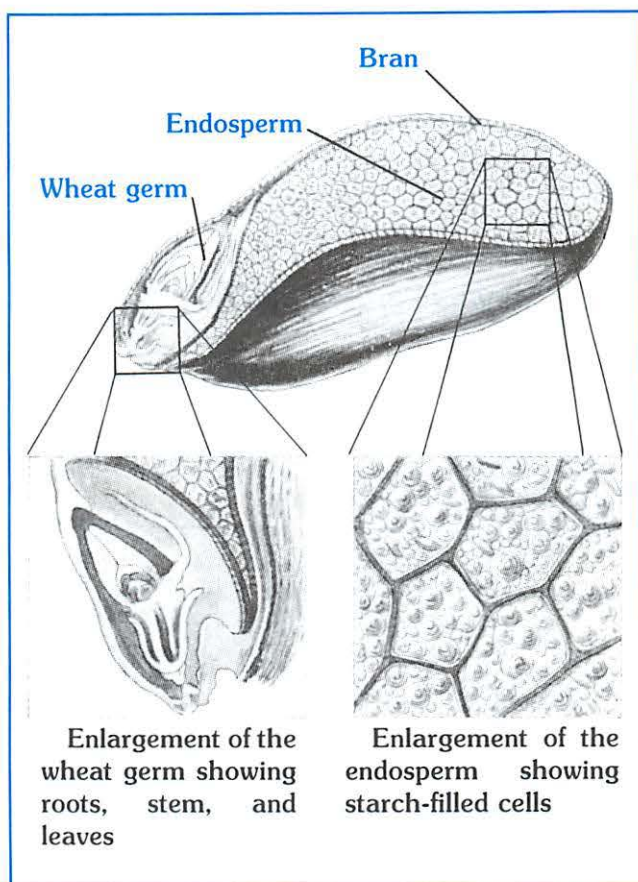
Even though United States millers ground more than twenty-four billion pounds of wheat into

bread flour, American farmers still had a surplus of over a half billion bushels of wheat in 1986. This surplus wheat is stored in cool, dry grain elevators which protect it from spoilage, insects, and rodents.

Wheat stores well because of its protective jacket which seals in freshness and seals out both oxygen and bacteria. Farmers call this protective jacket *bran*. Bran makes up about fifteen percent of the entire kernel and is rich in fiber, vitamins, and protein. As long as the protective bran remains unbroken, wheat can be stored for years.

Inside this shell is a soft, white substance called the *endosperm*. The endosperm contains the stored food that a sprout uses when it germinates. It makes up about eighty-five percent of the total kernel and is rich in carbohydrates and *gluten*.

The word *gluten* comes from a Latin word meaning “glue.” Gluten consists of two strong and elastic proteins, *gliadin* and *glutenin*, which literally glue bread together while it rises.



The Book of Knowledge, The Grolier Society, Inc.

A third part of the kernel is the *wheat germ*. The wheat germ is a miniature wheat plant which is rich in oil and vitamins. It remains dormant as long as the protective jacket of bran seals it from outside

influences. However, as soon as a miller cracks the bran, wheat flour begins to "self destruct" in three different ways.

1 Wheat germ oil becomes rancid.

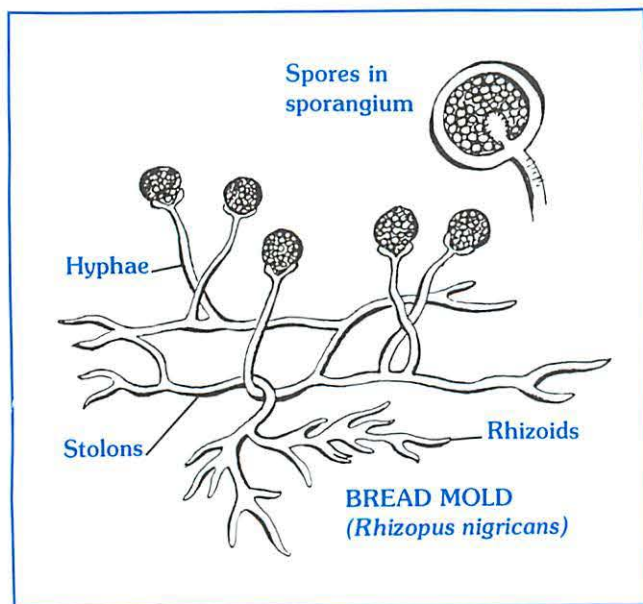
Oils and fats are especially susceptible to changes in color, fragrance, and flavor caused by air. Since the wheat germ contains most of the oil in a wheat kernel, it is the first part to turn rancid, which gives the entire batch of flour an "old" taste.

Enzymes such as *amylase*, also known as *diastase*, convert starches into sugars as a wheat seed germinates. Normally the growing seed uses up these sugars as fast as they are available. However, in flour the sugars are not used up and they quickly turn rancid. This spoilage makes the flour taste flat at first and then bitter.

Even a few hours can make a big difference in the taste of flour. Unfortunately few people in the U.S. today ever experience the difference between bread baked with fresh whole wheat flour and bread baked with stale flour. We have grown accustomed to bread that tastes "flat" and have forgotten or have never experienced the flavor difference of fresh flour.

2 Wheat flour grows moldy.

If fresh flour remains uncovered at room temperature, it can become contaminated within twenty-four hours. Bacteria and mold grow rapidly in the rich flour of whole wheat and give off toxic wastes which have a foul smell.



Normally the tough protective jacket of bran which surrounds each wheat kernel seals out bacteria and mold. However, once wheat kernels are milled into flour, bacteria goes to work to contaminate the entire mix.

3 Wheat vitamins oxidize.

Whole wheat bread is one of the few foods which has an entire complement of B vitamins and is rich in vitamin E. However, breaking the protective layer of bran which surrounds a kernel of wheat exposes these vitamins and minerals to oxygen.

Oxygen breaks down the chemicals which make up a vitamin and converts them into useless compounds. This process begins immediately upon milling. Clinical tests reveal that virtually all of the vitamins stored inside a wheat kernel are oxidized within seventy-two hours.



Dept. of Cereal Chemistry and Technology North Dakota State University

The fact that almost all of the vitamins in flour are depleted within 72 hours after being milled is a powerful reason to eat fresh bread.

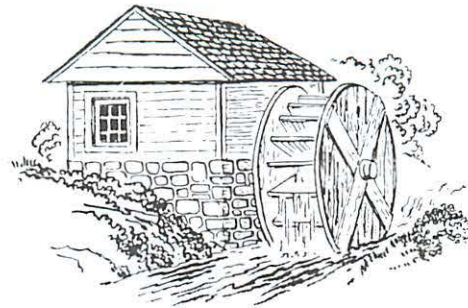
Prior to the 1900s most bread was milled locally and baked at home. This meant that just about every family had access to fresh, whole-grain flour. Since the flour could not be stored, only enough grain was ground fresh each day to meet the needs of the community.

However, in the 1920s new advanced roller mills allowed millers to separate wheat into its components. By removing the wheat germ, the wh

germ oil, and the bran, millers found that they could store the remaining white flour almost indefinitely.

They also found lucrative markets for the nutritious "by-products" of this new milling process and sold the bran and wheat germ as high protein food supplements for cattle. Local mills soon went out of business as the large roller mills produced huge volumes of long-lasting white flour at extremely low costs.

Because the new flour could be shipped long distances, mills became more centrally located near wheat producing farms. Instead of shipping whole grain across the country to local mills, these large mills ground the wheat first and shipped it as white flour.



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Stone grinding mills of the past produced a more nutritious flour than modern steel rolling mills do today.

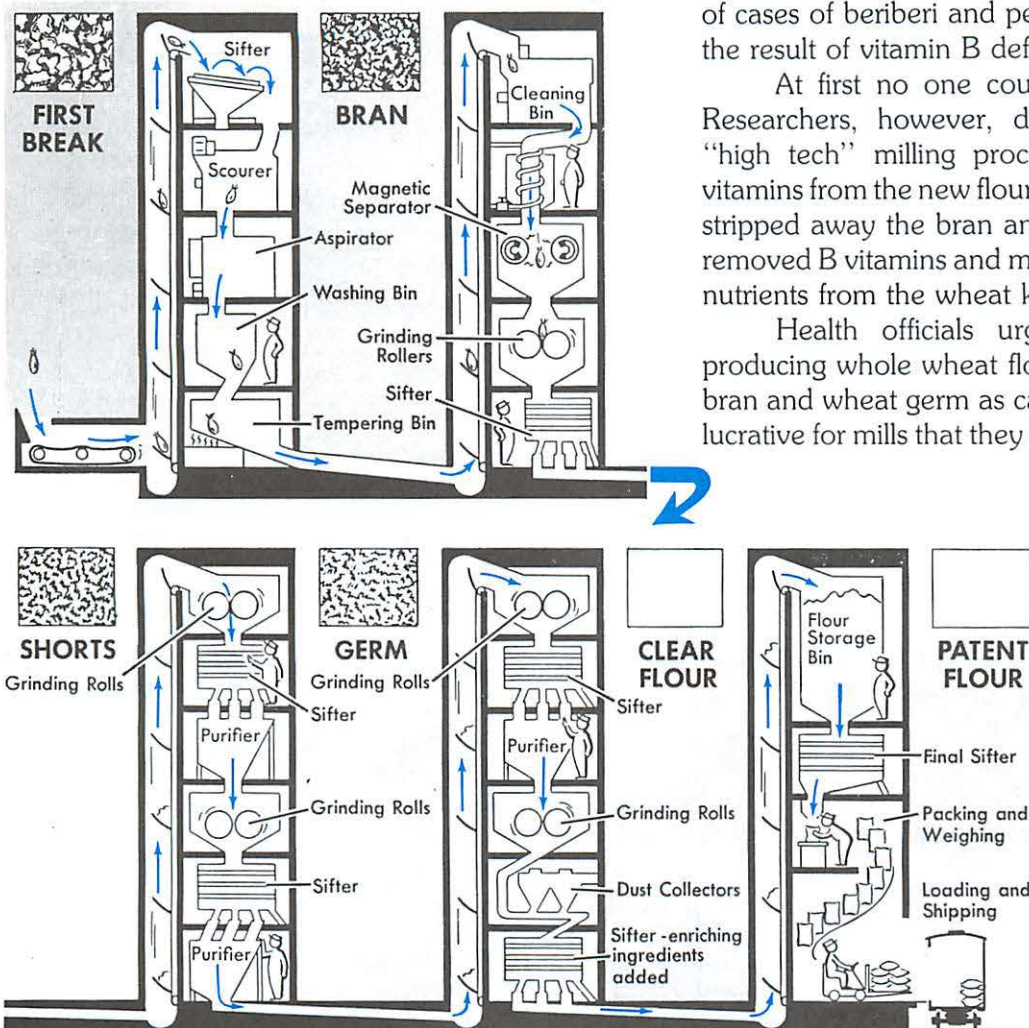
This procedure appeared to be a tremendous advance in technology. However, in the early 1930s health officials began reporting increasing numbers of cases of beriberi and pellagra. Both diseases are the result of vitamin B deficiencies.

At first no one could explain the problem. Researchers, however, discovered that the new "high tech" milling processes were removing B vitamins from the new flour. As the high speed rollers stripped away the bran and wheat germ, they also removed B vitamins and more than two dozen other nutrients from the wheat kernel.

Health officials urged mills to return to producing whole wheat flour again, but the sale of bran and wheat germ as cattle feed had become so lucrative for mills that they did not want to lose these

new markets. The great distances which had developed between mills and bakeries also prevented whole wheat flour from being shipped without spoiling.

Instead of producing whole wheat flour, mills chose to enrich white flour with B vitamins. This "enriched" bread solved the problem of beriberi and pellagra. However, other diseases associated with the loss of bran and wheat germ in flour are still prevalent today. (See the Medical Resource on pages 1731-1742.)



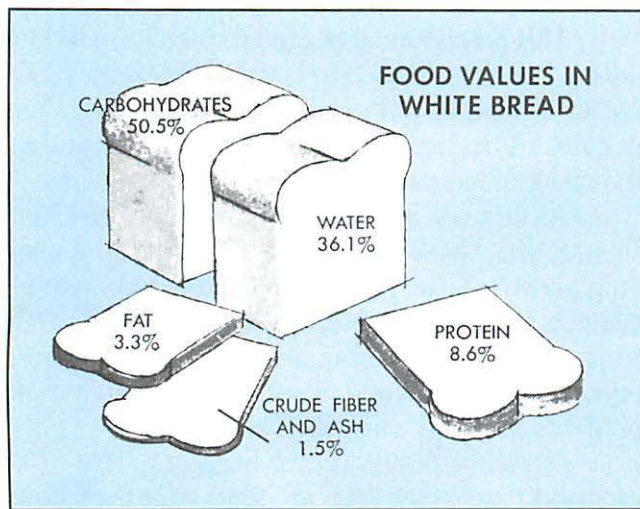
Millers remove approximately thirty percent of the wheat kernel in order to make white flour. Unfortunately, that thirty percent is the most nutritious part of the grain. First break, shorts, bran, and wheat germ are all removed before the final product, called patent flour, is bagged.



©World Book, Inc.

2 WHEAT GRAIN LOSES ITS ELASTICITY WHEN LARGE AMOUNTS ARE PROCESSED.

Protein is made up of unique sequences of amino acids which are arranged one after another in long chains. The shape of the chain depends on hydrogen atoms which are abundant in amino acids. These hydrogen atoms act like tiny little barbs to hook the chain together. Some proteins have so many of these hydrogen hooks that the protein chain becomes an intricately tangled mass.



©World Book, Inc.

The gluten in wheat is just such a protein. It is long, strong, and tangled. Before bakers can use gluten for baking, however, they must untangle it using a process called *kneading*. Kneading works like a mother gently combing out the tangles in a daughter's hair.

Bakers first add water and oil to the whole wheat flour. Water and oil work like a cream rinse on hair to soften the gluten and break the hydrogen bonds which keep the strands tangled. Proper kneading straightens out the gluten proteins to their greatest length. As the strands untangle, they give

bread dough an elastic quality. When fully untangled, the smooth gluten threads slide smoothly past one another without tearing or snagging.

When bakers mix yeast with gluten, gluten traps the bubbles of carbon dioxide which the yeast cells produce. Because the untangled gluten stretches without breaking, the bubbles look much like little balloons being inflated slowly with air. This is what makes bread rise.

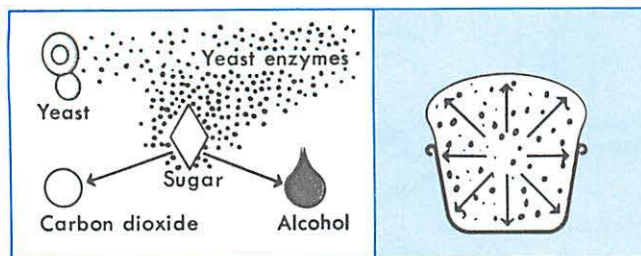
• *Insufficient kneading fails to untangle gluten fibers.*

Perhaps the greatest art in making bread is being able to knead gluten fibers to their elastic limits without breaking them. If a baker stops kneading too soon, the gluten remains partially tangled. When stretched, the dough tears apart. On the other hand, if a baker kneads bread dough beyond gluten's elastic limit, the long strands of gluten begin to break apart.

When it comes to making bread by hand, the kneading process is nothing short of hard work. A single loaf requires approximately 400 strokes to untangle the gluten to the point where it will stretch nicely without tearing. A lump of dough large enough to make two loaves requires 800 strokes or about 20 minutes of constant working.



Kneading is a gentle process of folding and flattening bread dough. This stretches the dough and untangles gluten fibers.



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Yeast gives increase to a loaf of bread while the baker rests. However, only dough with properly kneaded gluten fibers will trap the yeast gasses and cause the loaf to rise.

For most efficient kneading a baker should work at a surface high enough so that the baker's palms rest flat on the kneading surface with only a slight bend at the elbow. The actual kneading is a rhythmic folding and flattening using the heel of one hand to flatten the dough and the palm of the other hand to fold it.

Most bakers can knead enough dough to make two loaves of bread. The repetitive process of flattening and folding is actually very relaxing and enjoyable. However, kneading more than

loaves at a time can be exhausting. The simple dimensions of our hands and the strength of our arms cannot untangle the gluten strands in large batches of dough.

Insufficient kneading results in bread which fails to rise properly. Instead of stretching, the gluten catches on its own tangles and tears. This condition allows the trapped yeast gasses to escape and causes the bread dough to fall. When baked, the dough then produces heavy “bricks” rather than light, fluffy bread.

- ***Excessive kneading abuses the dough and shreds gluten fibers into useless pieces.***

A good baker does not pound or slap bread dough. Rough treatment only tears the tangled gluten fibers into short pieces. Instead, kneading must be gentle, smooth, and firm.

Yet, even proper kneading if carried to excess will produce the same end results. This is why a baker must carefully watch the dough to see when the gluten fibers have reached their elastic limits.

At first the dough feels sticky because all the water and oil has not yet been absorbed by the flour. Sticky dough clings to the kneader’s fingers without any capacity to stand alone. However, as the gluten absorbs more water and oil, it becomes smooth and only slightly tacky.

Sprinkling flour on the kneading surface helps to minimize the stickiness of the dough; however, the extra flour stiffens the dough and masks the feel of the gluten as it stretches. Most bakers learn to endure the sticky characteristics of bread dough so that they can more easily detect when the dough is ready.

Gentle kneading eventually untangles the elastic strands of gluten, and the dough begins to resist the kneader’s touch. This is the point at which kneading must stop. Once the dough feels resistant, the gluten strands will tear if they are kneaded any further.

Bakers who use small kitchen mixers to knead bread must be especially careful to check the dough every few minutes. These mixers are much rougher on gluten than human hands and can quickly over-knead a batch of dough.

When dough has been properly kneaded, a golf ball-size piece of dough should be able to stretch thin enough without tearing so that light will shine through it, giving the dough a translucent effect.

The proper way to prepare and knead bread



1 Water between 105° and 115° is used to dissolve yeast.



2 Flour is added to the yeast and vigorously mixed.



3 The dough is kneaded by folding and pushing down.



4 The dough is then covered and allowed to rise.



5 The dough should double in size.



6 The dough is then punched down and kneaded again.

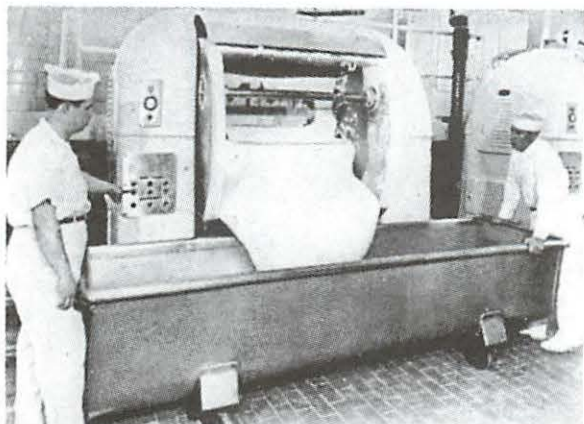
Betty Crocker Cookbook, Western Publishing

Knowing what the final product is supposed to look like, act like, and feel like helps a baker to know when to work harder and when to rest.

The widespread use of electric motors to do the work once done by hand has changed the nature of the way many things are done in the kitchen. Powerful electric mixers have replaced human hands and are quite capable of kneading enough dough to make 1,200 loaves in a single batch.

These machines are not limited by the size or strength of a human hand. However, the mechanical

whips required to stir and knead such large lumps of dough are much rougher than human hands. They are so rough, in fact, that they tend to rip the gluten apart rather than untangle it.



Giant machines mix and knead large batches of dough. An individual baker would require more than 2,000 hours to knead that same amount of dough.

To counteract this problem, commercial bakers add conditioners to the dough. These toughen the gluten protein and help it endure the rough kneading process without tearing.

Dough conditioners include monoglycerides, sodium steryl lactylate, potassium bromate, calcium peroxide, various enzymes, ascorbic acid, and azodicarbonamide. They work through complicated chemical reactions to alter the flour's protein structure. Unfortunately no one has determined what other ingredients they might also alter.

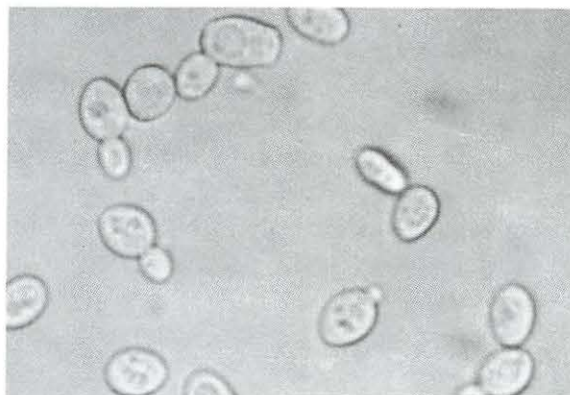
3 GRAIN BREAD LOSES ITS NUTRITION POTENTIAL WHEN BAKERS SHORTEN THE RISING PROCESS.

As yeast cells grow, they reproduce new cells through a process called *budding*. In just two hours a single yeast cell can multiply itself more than five hundred times. This potential means that bakers must be careful to start with just a little yeast and let it multiply slowly. If they add too much yeast at the start, a lump of dough might rise so quickly that it bursts.

Yeast cells multiply so rapidly that their number doubles almost every minute. With such rapid growth, only a few yeast cells can be mixed with the initial ingredients.

To prevent dough from rising too quickly, bakers add only enough yeast so that the dough will be the right size at the precise moment that the bread

dough is the most nutritious. At room temperature this amount of rising requires about four hours.



Red Star Yeast and Products Co.

Yeast cells multiply so rapidly that their number doubles almost every minute. With such rapid growth only a few yeast cells can be mixed with the initial ingredients.

- ***Yeast is ineffective in releasing nutrients if the bread is not allowed to rest.***

As the dough rises, it changes dramatically in size, but it also changes dramatically in nutritional value. As dough rises, a natural enzyme called *phytase* releases stored nutrients from the flour. Normally these nutrients are bound securely inside the wheat kernel until it begins to germinate. Germination stimulates phytase activity, causing it to unlock the stored minerals which the new plant needs for growth.

The fermentation process of yeast also triggers this same activity and causes phytase to transform non-usable elements into digestible nutrients. These minerals include phosphorus, zinc, calcium, magnesium, iron, and copper. Without proper fermentation these minerals remain inaccessible. They pass through our digestive tract without ever being absorbed.

- ***Yeast is insufficient if the dough is not reknaded.***

Yeasts are tiny one-celled organisms which are neither true plants nor true animals. They can remain in a sort of suspended animation for long periods of time. When frozen or dried and sealed in air-tight packets they can live without food for years.

However, when bakers mix yeast with warm water, the fragile cells spring to life. Almost immediately they begin to break down starches into sugars and then salts which they use for food. Bakers call this complicated chemical process *fermentation*.

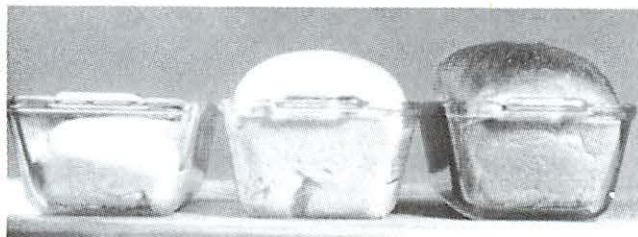
During fermentation yeast gives off carbon dioxide and alcohol as waste products.

Unfortunately, yeast cells cannot move through dough. They are stuck in one place. This means that they eventually use up all the starch in their immediate vicinity and begin to die from starvation. This process usually takes about ninety minutes at room temperature. Waste products of carbon dioxide and alcohol also build up around each yeast cell and will poison the cell if they are not removed.



Most yeast comes in premeasured packets, ready for use. When mixing yeast and water together, a baker must be very careful not to damage the brittle cell walls of the dried yeast. Stirring yeast briskly before each cell has become soft and pliable may destroy so many yeast cells that the dough will not rise properly.

Bakers have learned that to keep yeast growing they must periodically deflate the dough and re-mix it. Re-mixing the dough separates the yeast cells and spreads them evenly throughout fresh dough.



Wheat Flour Institute

Following kneading, the dough is formed into loaves and put into pans. It rises to twice its original size in about two hours; then it is baked.

Many bakers punch their dough after it has risen. This tears gluten fibers and hinders the second rising. For best results bakers must carefully and gently fold the dough just enough to re-mix the yeast cells with fresh nutrients.

Because more yeast cells are now at work, a second re-mixing is necessary within just sixty minutes. This "feeds" the yeast cells again so that they continue to grow. A third "feeding" must

follow about forty-five minutes later. Most bakers know these periods as the *first rising*, *second rising*, and *proofing*.

As bread is then baked, it continues to rise and gain in nutritional value until the center of the loaf reaches 145°F. This is the point at which the yeast cells die and all enzyme action ceases. Normally this adds about another thirty minutes to the total "rising" time of the dough. To get the most nutrition out of each wheat kernel, a baker must time the rising process so that the bread is baked at its nutritional peak. Extending the rising process beyond four hours, however, results in diminishing returns.

Large bakeries which make loaves of bread twenty-four hours a day often mix their liquid ingredients together with yeast and let them ferment separately from the flour. This short cut reduces the time needed to make a loaf of bread, but it also eliminates the process through which minerals are released from the flour. Without the chemical interactions which take place as bread rises slowly, minerals remain locked in the flour in a form which our bodies cannot digest and use.

Because bakeries mix up to 2,400 pounds of dough at a time, they must rely upon artificial yeast nutrients to support the fermentation process. These nutrients include ammonium sulfate, monocalcium phosphate, and calcium sulfate. These chemicals are actually salts which yeast cells use to grow and reproduce.



When bakers short cut the fermentation process by adding artificial yeast nutrients to large batches of dough, they eliminate the numerous enzymes which develop the dough's nutritional value.

Adding yeast nutrients to dough feeds yeast, but it fails to feed those who eat the bread. Whole wheat bread which rises slowly is substantially higher

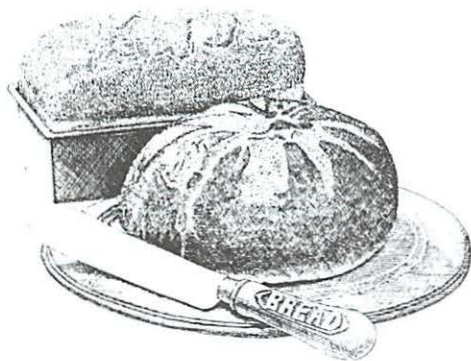
in potassium, magnesium, zinc, and vitamins B6, B12, and pantothenic acid. Pantothenic acid is a B vitamin which has been demonstrated to slow the effects of aging. It is 25 times more concentrated in whole wheat bread than it is in white enriched bread.

4 BREAD BEGINS TO GROW STALE AFTER IT IS BAKED.

Baking is the final step in making bread. When all the previous steps go just right, bread will rise dramatically in the oven as it bakes. Sometimes it will rise as much as one third its original size. Bakers call this *oven spring*. When this happens, the bread that results is a perfect combination of lightness and nutrition.

Most bread recipes call for baking bread at about 350–375°F for anywhere from thirty to fifty-five minutes, depending on the type of bread. However, because many factors can influence the baking process, time and temperature can rarely predict when a loaf is done. The best way to determine when a loaf has been thoroughly baked is to test it.

A loaf that is sufficiently baked should have a rich, deep, golden-brown crust and the upper edges of its sides should not be pink. It should slide out of its baking pan easily and feel springy to the touch when squeezed. The ultimate test of doneness, other than eating a slice, is to thump the loaf with a finger. If the loaf sounds hollow, it is done. If it sounds like a dull thud, it needs more time in the oven.



Bread, hot from the oven, begins to turn stale even as it cools. Within twenty-four hours it dries out, loses much of its flavor, and eventually turns moldy. Stale bread also loses much of its nutritional value.

• Under-baking fails to purify bread properly.

One of the purposes of baking is to stop the enzyme actions which break down proteins and starches. If not stopped, these enzymes eventually “over-ripen” the loaf. Like a banana that begins to turn brown, under-baked bread discolors and rots from the enzyme action inside the loaf.

Baking kills the yeast and evaporates fermented alcohol. This characteristic prevents the bread from rising any further and purifies the loaf of poisonous liquors which the yeast produced as a waste product. Baking also kills bacteria and mold both inside the loaf and on its surface.

In addition to purifying the loaf, baking also hardens gluten into a firm network of fibers which give structure to a loaf. This allows the loaf to be sliced without being mashed. Under-baking the bread fails to remove the water from gluten fibers and leaves them unable to withstand pressure. The result is a loaf of bread which sags hopelessly when cut.

• Over-baking destroys the purpose of bread.

Proper baking browns sugars in the crust to form a seal of protection against bacteria and mold. The crust also helps to seal in flavor and nutrition. Over-baking, however, burns the crust, causing it to crack easily and giving each slice a burnt taste.

Unfortunately, what a baker has so carefully worked to achieve can be destroyed if a loaf is neglected while it is baking. Over-baking oxidizes the vitamins and minerals in a loaf of bread and reduces its nutritional value to next to nothing.

• Adequate baking does not preserve bread.

In order to demonstrate for yourself what happens to bread after it is baked, try the following experiment. Select several different types of bread, such as store-bought whole wheat, rye, enriched white, homemade enriched white, and/or homemade whole wheat. Take three slices from each loaf and place one in the bread drawer of the refrigerator, expose another to air at room temperature, and seal the third slice in a plastic bag.

Now observe what happens to these bread slices over a period of a week. If you started with four different types of bread you will have twelve slices observe each day. Carefully study each slice for

of staleness and mold. Among other things, you might wish to gently squeeze each slice for hardness, taste a small piece for flavor, use a magnifying glass to search for mold, or time how quickly a small piece will absorb a drop of water.

Make a chart to record your observations. Across the top of the chart list the types of bread you are testing. Down the side of the chart list the places where you are storing the slices. Write your observations in the boxes where the columns and rows intersect. If the boxes are too small for a full week, make a separate chart for each day.

How do different storage places affect the molding of bread?

Storage spaces	White bread	Rye bread	Enriched white	Homemade whole grain
Bread box				
Refrigerator				
Plastic bag				
Open air				

What do your observations reveal about the limitations God has placed on storing bread?

Most commercial bread today is sealed in airtight plastic bags. Plastic keeps bread fresh and moist, but also creates a rich environment for mold and bacteria. This susceptibility to mold requires bakers to add preservatives to their bread which kill mold and bacteria and retard spoilage. One of the most common preservatives they use is calcium propionate.

Calcium propionate is a natural plant derivative which prevents the growth of mold. About one pound of it is added to each batch of bread dough. However, mold and bacteria become tolerant of preservatives and survive greater and greater

concentrations. In years to come these tolerant strains will require new and stronger preservatives to keep bread fresh.

The human body also becomes tolerant of these same preservatives. When exposed to greater concentrations, our system adjusts to accommodate them.



Betty Crocker's Cookbook, Western Publishing

Daily bread does not require preservatives.

5 FOLLOWING ALL THE RULES IN BREAD-MAKING IS STILL INEFFECTIVE WITHOUT OBEDIENCE TO GOD'S WORD.

Complete mixing, thorough kneading, patient rising, and exact baking may produce a perfect loaf of bread, but it will not furnish perfect nutrition. Jesus made it very clear that "... man shall not live by bread alone, but by every word that proceedeth out of the mouth of God" (Matthew 4:1-4). In fact, pursuit of perfect nutrition can become as much of a temptation as turning a stone into bread was for Jesus.

Unfortunately, it is possible for well-meaning believers to pursue only a portion of the nourishment which God provides. By obeying the letter of God's

law while ignoring the spirit of the law, they misplace their obedience, making them vulnerable to the lure of health food fads.

Proverbs reveals the truth that dried-out bread eaten in quietness is better than a house full of good food eaten with strife. (See Proverbs 15:17 and 17:1.)

“Better is a dry morsel, and quietness therewith, than an house full of sacrifices with strife” (Proverbs 17:1).

This same truth is confirmed a second time by God in the following verse:

“Better is a dinner of herbs where love is, than a stalled ox and hatred therewith” (Proverbs 15:17).

PROJECTS

How do the processes of making bread reveal the way Christ works within His Church?

What analogies do the processes of mixing, kneading, rising, baking, and eating have for believers? Look up verses which confirm these analogies.

THE PROCESSES OF MAKING BREAD

SCRIPTURAL ANALOGIES

• MIXING

1. Our lives must be mixed with Jesus. We need to leave our life to find new life.

• KNEADING

2. God putting pressure in our lives to help us get rid of sin and to refine Christ's character in our lives.

• RISING

3. Our lives become more like Christ as we wait for Him to change us.

• BAKING

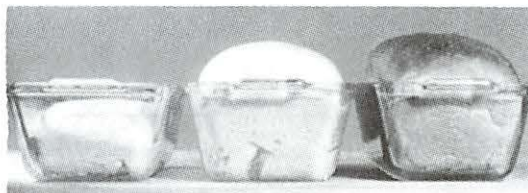
4. God puts fiery trials in our lives to get us call on God and strengthen our faith to purify us.

How did Jesus use the ingredients of bread to illustrate spiritual truth?

Each of the ingredients in a loaf of bread is rich in spiritual analogies. Jesus compared Himself to the water of life, which will cause the man who drinks it never to thirst again. Oil is a symbol of the Holy Spirit. Christians are the salt of the earth. God's Word is compared to honey.

Yeast (leaven) is both the symbol of sin and the kingdom of God. There was no sin in Jesus, yet he became sin for us when He died on the cross. Christians are also compared to a kernel of wheat that must fall to the ground and die. When Jesus took bread He said, "This is my body."

Look up verses on each of these items and see if you can discover further applications to the physical and spiritual significance of daily bread.



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INGREDIENTS OF BREAD

SCRIPTURE REFERENCES

• WATER

John 4:13-14
Rev. 22:1, Ps. 73:2

• OIL

1 Kings 17:24
2 Kings 4:1-7
Ex. 31:17, Ex. 10:7

• SALT

Matthew 5:13

• HONEY

Ps. 19:10, 119:103
2 Sam. 17:29

• YEAST

Ex. 12:34
1 Cor. 5:6, Gal. 5:9

• WHEAT KERNELS

1 Kings 17:18-24
2 Sam. 17:28

Date completed _____ Evaluation _____



**AUTHORITY
THROUGH
ACCURACY**

WHAT ESSENTIAL ELEMENT DOES THE U.S. RDA OVERLOOK IN ESTABLISHING GUIDELINES FOR OUR DAILY BREAD?



Ewing Galloway

Shoppers have come to depend upon the nutritional recommendations of the U.S. government.

If you pick up a box of breakfast cereal and look at the side panel, you will find a table that gives the nutrition information and the "Percentage of U.S. Recommended Daily Allowances" (U.S. RDA) for each serving of the cereal inside the box.

What does this chart mean? First, the nutrition information tells you the number of calories, the number of grams of protein, carbohydrate, and fat, and the number of milligrams of sodium that are in each serving of the cereal. You are also told what each serving size is.

Second, the "Percentage of U.S. Recommended Daily Allowances" tells you what percent of the body's daily requirements for certain vitamins and minerals is provided by a single serving of the cereal inside the box, both with and without milk.

How did the U.S. Food and Drug Administration determine these figures for the body's daily nutritional needs? Is there a recommended daily nutritional allowance for every vitamin and mineral?

Does following the U.S. RDA for all our nutritional needs provide everything we need for our daily bread?

"Recommended Dietary Allowances" (RDA) are the levels of intake of essential nutrients considered (in the judgment of the committee on Dietary Allowances of the Food and Nutrition Board, on the basis of available scientific knowledge) to be adequate to meet the known nutritional needs of practically all healthy persons."

(from Recommended Dietary Allowances, 1980 ed. p.1)

NUTRITION INFORMATION

SERVING SIZE: 1.3 OZ. (1 OZ. BRAN FLAKES WITH ½ OZ. DRIED FRUIT; 37.8 g, ABOUT ½ CUP)
SERVINGS PER PACKAGE: 11

	CEREAL & FRUIT	WITH ½ CUP VITAMINS A & D SKIM MILK
CALORIES	110	150*
PROTEIN	3 g	7 g
CARBOHYDRATE	29 g	35 g
FAT	0 g	0 g*
CHOLESTEROL	0 mg	0 mg*
SODIUM	230 mg	290 mg
POTASSIUM	180 mg	380 mg

PERCENTAGE OF U.S. RECOMMENDED DAILY ALLOWANCES (U.S. RDA)

PROTEIN	4	15
VITAMIN A	25	30
VITAMIN C	**	2
THIAMIN	25	30
RIBOFLAVIN	25	35
NIACIN	25	25
CALCIUM	**	15
IRON	100	100
VITAMIN D	10	25
VITAMIN B ₆	25	25
FOLIC ACID	25	25
VITAMIN B ₁₂	25	35
PHOSPHORUS	15	25
MAGNESIUM	10	15
ZINC	25	30
COPPER	15	15

*WHOLE MILK SUPPLIES AN ADDITIONAL 30 CALORIES, 4 g FAT, AND 15 mg CHOLESTEROL.

**CONTAINS LESS THAN 2% OF THE U.S. RDA OF THIS NUTRIENT.

INGREDIENTS: WHEAT BRAN WITH OTHER PARTS OF WHEAT, DRIED FRUIT (RAISINS, DATES, PEACHES, AND APPLES (WITH SULFUR DIOXIDE TO RETAIN COLOR)), SUGAR, CORN SYRUP, SALT, GLYCERINE, MALT FLAVORING, HONEY, SORBITOL,

VITAMINS AND MINERALS: IRON, NIACINAMIDE, ZINC (OXIDE), VITAMIN A (PALMITATE), VITAMIN B₆ (PYRIDOXINE HYDROCHLORIDE), VITAMIN B₂ (RIBOFLAVIN), VITAMIN B₁ (THIAMIN HYDROCHLORIDE), FOLIC ACID, VITAMIN B₁₂, AND VITAMIN D.

Nutritional information on a box of cereal

Look again at the side panel on the box of cereal. You will see the statement “Percentage of U.S. Recommended Daily Allowances (U.S. RDA).” This statement means that according to the Food and Drug Administration of the United States government, you will receive the listed percentage of vitamins and minerals for each serving of the cereal you eat.

If the side panel lists vitamin A as 25%, you will receive 25%, or one fourth, of your estimated daily need for vitamin A just by eating one serving of this cereal. If you eat four bowls, you will receive 100% of your estimated daily need for vitamin A.



Wide World

The committee that recommends daily dietary allowances was originally formed during the Second World War for national defense purposes.

How did the Food and Drug Administration decide what 100% of your estimated needs are for vitamin A, vitamin C, calcium, iron, and all the other vitamins and minerals your body needs daily?

The U.S. Recommended Daily Allowance for vitamins and minerals is based on a study, the *Recommended Dietary Allowance*, done by the Committee on Dietary Allowances Food and Nutrition Board. This study was funded by the National Institutes of Health and the United States Public Health Service.

The first study, published in 1943, was an attempt to provide standards of good nutrition for the purpose of planning food supplies for national defense. The original goal was to revise the study every five years as more information was learned about nutrition.

The Committee on Dietary Allowances began conducting research in the early 1940s to determine just what the body's daily nutritional needs are. The last revision of their research was published in 1980. The 1985 revision was never completed, because the researchers could not come to an agreement on certain issues.

The Recommended Dietary Allowances (RDAs) published in the 1960 study are given for three age groups—infants, children, and adults. The adult age group is then divided into males and females.

Since each group has its own nutritional needs, the RDAs for each group are different. According to the 1960 study, adult women require more iron than adult men. Teenage boys and girls require more vitamin D than other age groups. Infants require only one third of the calcium required by teenage boys and girls.

U.S. Recommended Daily Allowances (U.S. RDAs) are the standards that the Food and Drug Administration has set for nutrition labeling of food. These standards are based by law on the 1960 edition of RDAs published by the dietary Committee. U.S. RDAs use the *highest RDA* for a particular vitamin or mineral as determined by the 1960 study in order to make sure everyone has enough of each.



H. Armstrong Roberts

The U.S. RDA recommendations fail to make a distinction between children, women, and men.

For example, the 1960 study gives an RDA of iron for young children as 15 mg (milligrams), for men as 10 mg, and for women as 18 mg. The U.S. RDA value for all adults for iron is the highest of the three values—18 mg. Where the RDA for men of vitamin A is 1000 units and for women is only 800 units, the U.S. RDA for all adults is the higher value, 1000 units.

These maximum RDA values are the U.S. RDA values which are found on the sides of cereal boxes and many other prepared foods. They are set by law and are based on the 1960 edition of the nutrition study done by the committee on Dietary Allowances and published by the National Research Council.

IS THERE AN RDA FOR EVERY VITAMIN AND MINERAL?

No. RDAs are chosen only after enough research has been done to make an accurate estimate of what amount of a vitamin or mineral is necessary.

There are many other vitamins, minerals, trace elements, and electrolytes that our bodies require for which there is no established RDA. Some of these are vitamin K, potassium, and sodium. The 1980 Committee on Dietary Allowances chose what it believed were "safe and adequate" amounts for these nutrients but could not establish an RDA for them.

Recommended Daily Dietary Allowances

Food and Nutrition Board,
National Research Council (Revised 1980)

	Age years	Weight lbs	Height in	Energy needs cal
Infants	0 - ½	13	24	690
	½ - 1	20	28	945
Children	1 - 3	29	35	1300
	4 - 6	44	44	1700
	7 - 10	62	52	2400
Men	11 - 14	99	62	2700
	14 - 18	134	69	2800
	19 - 22	147	70	2900
	23 - 50	154	70	2700
	51 +	154	70	2400
Women	11 - 14	97	62	2200
	15 - 18	119	64	2100
	19 - 22	128	64	2100
	23 - 50	128	64	2000
	51 +	128	64	1800
Pregnant				+300
Lactating				+500

HOW TO USE THE TABLES

Look at the table for Recommended Daily Dietary Allowances. The first column on the left side lists Infants, Children, Men, and Women.

In the column to the right of the word "Children" are three different age groups: 1-3-year-olds, 4-6-year-olds, and 7-10-year-olds. Each age group is on a different line. Look at the line for the age group "7-10-year-olds."

Now move to the right on this line to the next column, which lists the average weight for a 7-10-year-old child. The next column to the right on this line indicates the average height for a 7-10-year-old child.

What does the next column to the right on this line tell you? Check the heading at the top of this fifth column. It reads "Energy Needs, cal." This column tells you the average amount of energy a healthy 7-10-year-old child needs. The abbreviation *cal* means that this energy is measured in calories.

	Age years	Vit. C mg
Infants	0 - ½	35
	½ - 1	35
Children	1 - 3	45
	4 - 6	45
	7 - 10	45
Men	11 - 14	50
	15 - 18	60
	19 - 22	60
	23 - 50	60
	51 +	60
Women	11 - 14	50
	15 - 18	60
	19 - 22	60
	23 - 50	60
	51 +	60
Pregnant		+20
Lactating		+40

Now find the column for vitamin C in the above chart. Follow the line for "Children 7-10" across the page to the vitamin C column. What figure do you see? You should find "45." This is the number of units of vitamin C, measured in milligrams (mg), recommended for a healthy child 7-10 years old.

The following chart gives the “estimated safe and adequate daily dietary intakes of selected vitamins and minerals.” It is read the same way as the first two charts.

Estimated Safe & Adequate Daily Dietary Intakes of Selected Vitamins & Minerals

Because there is less information on which to base allowances, these figures are not given in the main table of the RDA and are provided here in the form of ranges of recommended intakes.

	Age years	Vit. K µg	Sodium mg
Infants	0 – 0.5	12	115 – 350
	0.5 – 1	10 – 20	250 – 750
Children and	1 – 3	15 – 30	325 – 975
	4 – 6	20 – 40	450 – 1350
Adolescents	7 – 10	30 – 60	600 – 1800
	11 +	50 – 100	900 – 2700
Adults		70 – 140	1100 – 3300

For example, look in the first column on the left. Locate the category “Children and Adolescents.” Find the same age group, “7–10 years,” again. Now find the column labeled “Sodium, mg.” Move across the page from left to right on the line for 7–10-year-old children until you come to the sodium column. What figures are there? You should find the numbers “600–1800.”

Look at the table for the U.S. RDA in the next column. Here the vitamins and minerals are on the side, and the ages are written across the top. Go down the first column on the left until you find the mineral zinc. Move to the second column on the same line as zinc. The figure is 15 mg. This is the amount of zinc, measured in milligrams, recommended for all adults and children older than 4 years of age.

Now move to the third column on the same line as zinc. This figure is 8 mg. This is the amount of zinc, measured in milligrams, recommended for infants and children younger than 4 years old.

The U.S. RDA

*U.S. Recommended Daily Allowances—Food and Drug Administration standards for nutrition labeling of foods, based by law on the 1960 RDA.**

	Adults and children over 4	Infants and children under 4
Protein	65 g	28 g
Vitamin A	5000 iu	2500 iu
Vitamin C	60 mg	40 mg
Thiamin	1.5 mg	0.7 mg
Riboflavin	1.7 mg	0.8 mg
Niacin	20 mg	9 mg
Calcium	1000 mg	800 mg
Iron	18 mg	10 mg
Vitamin D	400 iu	400 iu
Vitamin E	30 iu	10 iu
Vitamin B ₆	2 mg	0.7 mg
Folic Acid	0.4 mg	0.2 mg
Vitamin B ₁₂	6 µg	3 µg
Phosphorus	1000 mg	800 mg
Iodine	150 µg	70 µg
Magnesium	400 mg	200 mg
Zinc	15 mg	8 mg
Copper	2mg	1 mg
Biotin	300 µg	150 µg
Pantothenic Acid	10 mg	5 mg

*Labels for nonfood vitamin-mineral supplements follow a slightly different format.

DOES FOLLOWING THE U.S. RDA PROVIDE EVERYTHING YOU NEED FOR YOUR DAILY BREAD?

No. By definition, the RDAs established by the Committee on Dietary Allowances, on which the U.S. RDAs are based, are only for large groups of already healthy people.

For example, the RDAs for 7–10-year-olds are the committee’s best guess for how to feed a large group of healthy 7–10-year-olds so that as many of them as possible will remain healthy. The RDAs do not take into account the varying nutritional needs of individual children. They also should not necessarily be applied to a child who is already sick, since his nutritional needs differ from those of a healthy child.

There is a great deal of disagreement as to the correct amount of vitamins and minerals healthy people need in order to remain healthy. Furthermore, there are vitamins and minerals for which no RDA has been established.



H. Armstrong Roberts

God has perfectly blended the vitamins and minerals in fruits and vegetables, but food alone is not enough to keep us healthy.

Suppose that all of these problems were solved and there was a way to find exactly the right RDA for every vitamin and mineral for every person's needs. Would following a diet which included the precise amounts of all the necessary vitamins and minerals provide everything a person needs for his daily bread?

Even researchers have found that the answer to this question is "no."



HOW THE MISSING INGREDIENT FOR DAILY NUTRITIONAL NEEDS WAS DISCOVERED

In 1948, physicians in the U.S. Public Health Service began a study in Framingham, Massachu-

setts. The purpose of the study was to follow over five thousand healthy adults for at least thirty years in an attempt to find an association between medical history, lifestyle, and heart disease.

Long before the end of the thirty years, doctors found the relationship between high blood pressure, high cholesterol, and smoking, and the increased risk of heart attack. These are referred to today as *high risk factors*.

Researchers went on to show that eating a proper diet, increasing regular exercise, and refraining from smoking all work to reduce these high risk factors and lower the incidence of heart attacks.

However, the Framingham project revealed another secret. When the doctors began their search for a community to study, they looked for an "average" community with dependable people they could easily follow for the next thirty years.

They chose Framingham because of its stability—strong religious beliefs, low divorce rate. It was a town where few people moved in or out.

After twenty years of study, the physicians found the link between high blood pressure, high cholesterol, and smoking. Yet, they were also surprised to find that people in Framingham suffered far fewer heart attacks than what had been expected. In fact, one third fewer people in Framingham had heart disease than the national average, and over half of the residents who died from heart disease were not even in the most risk-prone category!

A team of researchers from the University of Oklahoma conducted similar research in the town of Roseto, Pennsylvania. The heart attack rate in this small town was only one fourth of the national average, while the heart attack rate in similar towns nearby was much closer to the national average.

The doctors first began looking for the high risk factors. They found that residents of Roseto were actually *more* overweight than their neighbors, had as much animal fat in their diets, suffered as much diabetes and high blood pressure, and exercised the same. Yet, they suffered one fourth as many heart attacks.

What made Roseto and Framingham different from other towns? What was present in the residents of these towns that could not be accounted for by examining RDAs and high risk health factors?

Although the researchers did not recognize it as such, the characteristic which made Framingham and Roseto different was that the residents followed Biblical principles of Godly love.

What impressed the doctors was the love and acceptance felt in these communities. There was a low divorce rate, families were close-knit, the elderly were cherished, the authority of parents was respected, the positions of husband and wife within the family were upheld, and the church was an integral part of life.

These principles of Godly love were applied daily not only within the family, but also to the entire

community. It was the application of these principles of Godly love (a factor which could not be measured by a Recommended Daily Allowance for diet and nutrition) that provided the most important part of the "daily" bread needed by the people in these communities.

Solomon, in his wisdom, recognized the great importance of love as a part of our daily nutritional needs when he wrote, "Better is a dinner of herbs where love is, than a stalled ox and hatred therewith" (Proverbs 15:17).



Recommended Daily Dietary Allowances (RDA)

Food and Nutrition Board, National Research Council (Revised 1980)

	Age years	Weight lbs	Height in	Energy needs cal	Protein g	Vit. A IU	Vit. D IU	Vit. E IU	Vit. C mg	Folic Acid mg	Niacin mg	Ribo- flavin mg	Thiamin mg	Vit. B ₆ mg	Vit. B ₁₂ µg	Calcium mg	Phos- phorus mg	Iodine µg	Iron mg	Mag- nesium mg	Zinc mg
Infants	0 - 1/2	13	24	630	13.2	1400	400	4.5	35	0.05 mg	6	0.4	0.3	0.3	0.5	360	240	40	10	50	3
	1/2 - 1	20	28	945	18.0	2000	400	6	35	0.05 mg	8	0.6	0.5	0.6	1.5	540	360	50	15	70	5
Children	1 - 3	29	35	1300	23	2000	400	7.5	45	0.10 mg	9	0.8	0.7	0.9	2.0	800	800	70	15	150	10
	4 - 6	44	44	1700	30	2500	400	9	45	0.20 mg	11	1.0	0.9	1.3	2.5	800	800	90	10	200	10
	7 - 10	62	52	2400	34	3300	400	10.5	45	0.30 mg	16	1.4	1.2	1.6	3.0	800	800	120	10	250	10
Men	11 - 14	99	62	2700	45	5000	400	12	50	0.40 mg	18	1.6	1.4	1.8	3.0	1200	1200	150	18	350	15
	15 - 18	134	69	2800	56	5000	400	15	60	0.40 mg	18	1.7	1.4	2.0	3.0	1200	1200	150	18	400	15
	19 - 22	147	70	2900	56	5000	400	15	60	0.40 mg	19	1.7	1.5	2.2	3.0	800	800	150	10	350	15
	23 - 50	154	70	2700	56	5000		15	60	0.40 mg	18	1.6	1.4	2.2	3.0	800	800	150	10	350	15
	51+	154	70	2400	56	5000		15	60	0.40 mg	16	1.4	1.2	2.2	3.0	800	800	150	10	350	15
Women	11 - 14	97	62	2200	46	4000	400	12	50	0.40 mg	16	1.3	1.1	1.8	3.0	1200	1200	150	18	300	15
	15 - 18	119	64	2100	46	4000	400	12	60	0.40 mg	14	1.3	1.1	2.0	3.0	1200	1200	150	18	300	15
	19 - 22	128	64	2100	44	4000	400	12	60	0.40 mg	14	1.3	1.1	2.0	3.0	800	800	150	18	300	15
	23 - 50	128	64	2000	44	4000		12	60	0.40 mg	13	1.2	1.0	2.0	3.0	800	800	150	18	300	15
	51+	128	64	1800	44	4000		12	60	0.40 mg	13	1.2	1.0	2.0	3.0	800	800	150	10	300	15
Pregnant				+300	+30	+1000	+400	+3	+20	+0.80mg	+2	+0.3	+0.4	+0.6	+1.0	+400	+400	+25	+150	+5	
Lactating				+500	+20	+100	+400	+4.5	+40	+0.60mg	+5	+0.5	+0.5	+0.5	+1.0	+400	+400	+50	+150	+10	

PROJECT 1

Learn to use this chart.

1. What is the Recommended Dietary Allowance of protein for men ages 19-22? *56g*
2. What is the RDA for vitamin A for children ages 1-3? *2000*
3. Find the correct line for your age. How close are you to the average height and weight?
4. Look at the Estimated Safe and Adequate chart (page 1716). Find the right line for your age. How much sodium is safe and adequate for you?
5. Check the sodium levels on some food packages.
6. Look at the U.S. RDA chart on page 1716. How much iron should adults and children over age 4 have? *16mg*

PROJECT 2

Apply the chart.

Find a calorie/nutrition chart. A local hospital patient education department will have this material. Another source is cookbooks, especially those designed for diabetics.

Plan a menu that provides 100% of the recommended vitamins and minerals for your age group, but within the caloric limitations of your age group.

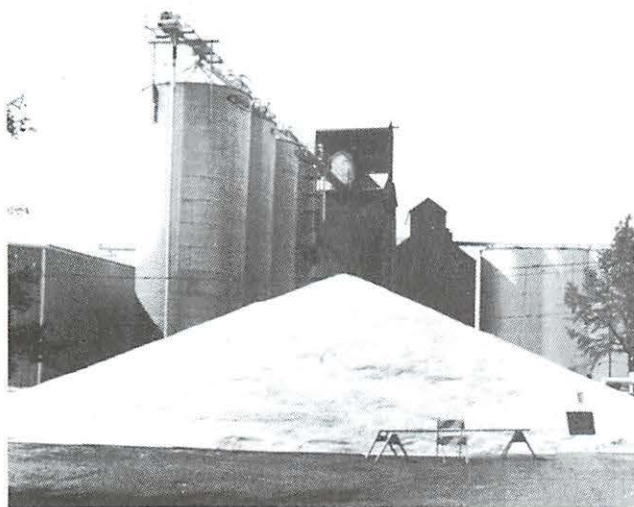
Plan a daily menu which includes each member of your family. Try to make a weekly one. Then go shopping for the necessary ingredients. Fit the cost of the items on this list into your family's grocery budget for one week.

Date completed _____ Evaluation _____



LAW RESOURCE

WHAT CONSEQUENCES RESULT WHEN GOVERNMENT BECOMES THE PROVIDER OF DAILY BREAD?



U.S. Department of Agriculture—Soil Conservation Service

Government-owned surplus grain piles up almost as fast as the multibillion-dollar expense of federal food assistance programs. According to God's principles, both farmers and the poor would be better off without the government's "help."

When Jesus instructed His disciples to ask their Heavenly Father for their daily bread, He was reaffirming the basic Scriptural principle that **God is not only our Creator but also the Sustainer of all life.**

The Psalmist expressed it this way: "He watereth the hills from his chambers: the earth is satisfied with the fruit of thy works. He causeth the grass to grow for the cattle, and herb for the service of man: that he may bring forth food out of the earth; And wine that maketh glad the heart of man, and oil to make his face to shine, and bread which strengtheneth man's heart. . . ."

"These wait all upon thee; that thou mayest give them their meat in due season. That thou givest them they gather: thou openest thine hand, they are filled with good" (Psalm 104:13-15, 27-28).

Throughout history, whenever governments have tried to replace God as the ultimate source of man's provisions, the result has usually been anarchy followed by totalitarianism. The later years of the Roman Empire and the French Revolution are valid examples of this development.

In the United States today, the tendency to look to the government rather than to God as the provider of daily bread takes many different forms.

Probably the most familiar is the welfare system administered by the Department of Health and Human Services. However, the federal agency through which our government tries to perform this function most directly is the United States Department of Agriculture (USDA).

Two broad areas of USDA activity—agricultural policies and food distribution programs—clearly illustrate the devastating consequences of governmental interference in the provision of food.

1 WASTE IS ENCOURAGED.

Both our current national farm policies and our national food programs have their roots in the farm depression of the 1920s and the New Deal legislation of the 1930s.



UPI

The Great Depression followed the Stock Market crash in 1929. Crowds surged upon the New York Stock Exchange on October 29. Many investors who had lost everything committed suicide, and the nation became ripe for sweeping changes in government policy that would promise to protect against a recurrence.



Wide World

During the Great Depression, unemployed men sold apples.



Dictionary of American Portraits
Courtesy Franklin D. Roosevelt Library

The designer of the New Deal was Franklin Delano Roosevelt (1933–1945).

• NEW DEAL FARM POLICIES

The four years prior to World War I were a sort of golden age for American agriculture. Land prices were rising, and prices of farm products were high and relatively stable.

Then during the war (1914–1918), farm prices more than doubled. When they did not drop back down immediately following the armistice as expected, farmers began to think that a new price level had been established. However, 1921 brought a severe slump, probably the worst this country's farmers have ever experienced.

Congress was offered several proposed methods of helping the farmers. The most popular plan advocated that the government purchase surplus commodities (the crops the farmers could not sell on the market) and then export them to foreign countries. No such legislation passed in the 1920s, but the ongoing debate sparked by these proposals helped gain public acceptance for the principle of federal intervention in agriculture.

By 1933, worsening conditions convinced the President and Congress that something had to be done for the farmers, so they approved the Agricultural Adjustment Act (AAA), the first major piece of New Deal legislation. Within months of its passage, farmers actually began killing off their livestock in order to collect federal payments. For example, over six million pigs were destroyed.

The following year the AAA started paying farmers to *not* grow certain crops. The purpose of this program was to benefit the farmers by getting rid of surpluses in order to raise the price of staple crops,



The massive scope of government involvement in giving out daily bread is often obscured by the fact that it occurs through so many different programs. The following is a list of food assistance programs administered by the Department of Agriculture and the approximate annual cost to the taxpayers. These are based on government figures from the first quarter of 1987 (except where indicated):

Food Stamp Program	\$2,990,000,000
National School Lunch Program	\$1,041,000,000
Puerto Rico Nutrition Assistance Program (1982)	\$396,000,000
Supplemental Food Program for Women, Infants, and Children	\$336,000,000
Temporary Emergency Food Assistance Program	\$210,000,000
School Breakfast Program	\$142,000,000
Child Care Food Program	\$121,000,000
Nutrition Program for the Elderly	\$36,000,000
Summer Food Service Program (1985)	\$20,000,000
Food Distribution Program on Indian Reservations	\$12,000,000
Needy Family Program (1985)	\$10,000,000
Commodity Supplementary Food Program	\$9,000,000
Special Milk Program	\$4,000,000

Note that these are all USDA programs, not part of the welfare programs funded and administered through the Department of Health and Human Services.

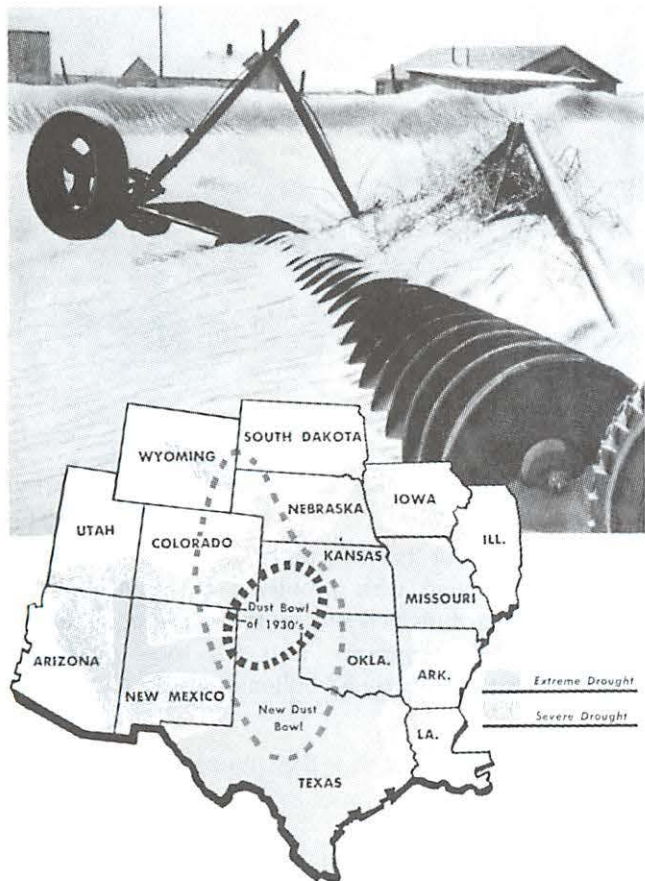
but its most immediate effect was to create a general scarcity of food.

Prices did go up, but the increase may have been due more to the severe drought in 1934–35 than to the new law. In fact, the farm price index had begun a five-year climb in 1932, which might have even continued had the government not intervened.



Arthur Rothstein, Farm Security Administration

The drought spawned devastating dust storms like this one in Oklahoma in 1936, eventually creating the famous Dust Bowl. Nearly 140 million acres were stripped of their topsoil. The devastating economic consequences prompted the government to establish additional relief measures for farmers.



Wide World

When farm prices fell again in 1938, the legislature reacted by passing another Agricultural Adjustment Act. This bill created and funded a government agency to loan money to farmers so they could store their surplus crops rather than selling them at a loss.

In the meantime, Congress passed another law authorizing the Secretary of Agriculture to purchase surplus commodities in order to get them off the market. These products were then to be used in school lunches or donated directly to needy families. The theory was that this project would help farmers stay in business and at the same time benefit the poor.

By the time the United States entered World War II, the government had made \$5.3 billion in direct payments to farmers under the various programs enacted during the Depression years. The amount of money expended, however, was not as significant as the fact that a whole new government bureaucracy had been created.

Like Social Security and most other relief measures of the 1930s, the farm programs were intended to be temporary ways of getting the farmers back on their feet, but once the bureaucratic machinery was set in motion it could not easily be stopped, even when the programs were no longer really needed.

During the war (1941–1945), the farm labor force dwindled some seventeen percent, but improved machinery and new fertilizers more than made up for the difference. These factors, combined with good weather, resulted in abundant harvests. Increased wartime demand insured high prices, but the New Deal measures remained in effect, and government-owned surpluses continued to mount up.

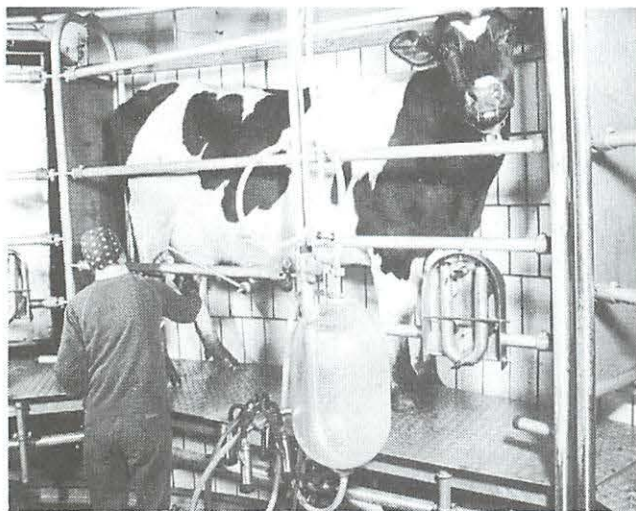
Following the Korean War, government stocks of wheat increased nearly eightfold from 165 million bushels in 1952 to 1.3 billion in 1960. In one year alone (1953), the government acquired forty-one percent of the entire wheat crop. Accumulations of other surplus commodities (such as feed grains and milk products) grew almost as rapidly.

New laws designed to eliminate the surpluses seemed to succeed only in spending more of the taxpayers' money. Public Law 480, for example, was passed in 1954 to attempt to eliminate surpluses by donations and low-interest loan sales to poor countries. By 1980, \$30 billion had been spent, but surpluses were still a problem.



Congressional Quarterly, Inc.

During the 1940s, new technologies brought about increased productivity in spite of the decline in farm population.



Grant Heilman

The federal government eventually came to the point of committing itself to purchasing virtually one hundred percent of the milk products (dry milk, butter, and cheese) dairymen and processors could not sell on the open market. The result was huge stockpiles of these commodities.

• NEW DEAL FOOD PROGRAMS

The original food stamp program was begun in 1939 as one means of dealing with the growing stockpile of government-owned surplus crops. People on relief were allowed to purchase orange stamps that could be used to buy anything sold in qualified stores, and they were given free of charge blue stamps which could be redeemed for specific surplus foods.

The system proved to be so complicated and wasteful that it was discontinued less than four years

later. It was estimated that as much as one fourth of the federal money involved in this program was mishandled. The program was successful, however, in reinforcing the image of Uncle Sam as the provider of daily bread.

Then in the 1960s the food stamp program was resurrected as a way to help farmers, not the hungry. It was supposed to eliminate the oversupply of some agricultural products. Although the annual cost rose from only \$35 million the year after the program began to \$13 billion in 1983, the impact on farm surpluses was not very significant. Nor has it been particularly effective in feeding the hungry. One reason for its inefficiency stems from the two-level structure of the program: it is funded by the federal government but administered locally by state agencies.

Since the money comes from "outside" the community, there is little built-in incentive to control waste. In fact, the system encourages waste because overpayment errors simply result in more money flowing into the local economy.



U.S. Department of Agriculture

Throughout its history, the food stamp program has been plagued with problems of fraud, political controversy, and inefficiency. Of the dozen or so federal food assistance programs, it is the most expensive, costing taxpayers nearly \$3 billion annually.

Studies have shown that over ten percent of all food stamp payments are in error. Of every \$100 misspent, nearly \$80 is in overpayments rather than underpayments. This means that in a single year nearly a billion dollars in food coupons goes astray.

The impact on local communities of losing track of this amount of money is considerable. Very few localities have managed to reduce their erroneous payments even to the level of the federal government's rather lenient standards. Even then, the remaining payments are staggering. If the city of Chicago, for example, had reduced its misplaced payments to government standards in 1978, the local economy would have lost an estimated \$48 million in outside funds.

Another example of waste occurred in the early days of the Supplemental Food Program for Women, Infants, and Children (WIC). Women in Washington, D.C., had been told that they could get supplemental bags of food at several distribution points. In spite of a \$20 million budget at the federal level, the local agencies were so underfunded and understaffed that food could not be delivered to all the distribution centers. Every month, three thousand bags of groceries went uneaten.

2 DISTRIBUTION IS INEQUITABLE.

Since God did not design government to perform the function of providing daily bread, policies and programs that cause it to take on that role often end up helping the wrong people, and those who need the most help tend to receive the least benefit from governmental assistance programs.

• FARM POLICIES

The primary goal of U.S. agriculture policy has been to keep farmers on the farm. Since the Great Depression, the focus has been on helping the small farmer in particular to survive the economic fluctuations that would force him to give up farming.

During the 1950s, farm subsidies had just the opposite effect. Because of regional loyalties, commodity interests, and party politics, Congress could not come to a consensus about whether to follow a free-market strategy or to try to strictly control the farm economy. They compromised by taking a middle-of-the-road approach that, in effect, canceled out the potential benefits of either extreme.

Legislation of that decade set price supports at moderate rather than high levels and limited production, but not too rigidly. When farm income fell after the Korean Conflict, the price supports helped small farmers somewhat but not enough to keep many of them from going out of business, even though the annual cost to the government by 1960 was close to four billion dollars.



U.S. Department of Agriculture—Soil Conservation Service

Thanks to increased mechanization, better fertilizers, and widespread specialization, productivity did rise sharply in the 1950s, but the smaller farms could not readily afford to invest in the new technology, especially since continuing surpluses kept prices low in comparison to production costs.

The limits on production restricted the amount of land used to grow certain crops rather than the actual amount produced. Thus, their true effect was to encourage greater productivity. Even though farmers planted fewer acres, they used every means to get a higher yield per acre.



Tobacco, one of the most heavily subsidized non-food crops, dramatically illustrates how dependence on the government harms the so-called "beneficiaries." At the same time the USDA was underwriting tobacco production, the Surgeon General was discouraging people from using the product.

Thus many small farmers were squeezed out because they simply could not compete with the large commercial growers, who often received government payments as large as one million dollars each year.

The same kind of inequity has plagued federal programs into the 1980s. For example, in 1983, National Farms, a huge agribusiness that operates in three states, was given two and a half million dollars' worth of corn and wheat.

Even though federal regulations prohibit the USDA from awarding more than \$50,000 in one year to any single farm, the agency deliberately sidestepped the law by claiming that the benefits were in the form of commodities rather than cash so the limit did not apply. Once again those who needed the help the least benefited the most.

• FOOD PROGRAMS

The food stamp program provides another example of how government aid by-passes those who need it the most. According to food stamp legislation, counties that implemented the system had to discontinue the food donation program, which simply distributed surplus commodities directly to needy families. Studies repeatedly showed that fewer people participated in the food stamp program than in the previous food donation program. Most researchers attributed this lack of participation to the fact that many of the poor did not even have enough cash to buy the stamps.



U.S. Department of Agriculture

A USDA employee prepares to give surplus dairy products to this woman and her children under the Supplemental Food Program for Women, Infants, and Children (WIC). Although it is called supplemental, this may be the only food some people receive.

Political considerations and bureaucratic red tape also produce inequities in distribution. For example,

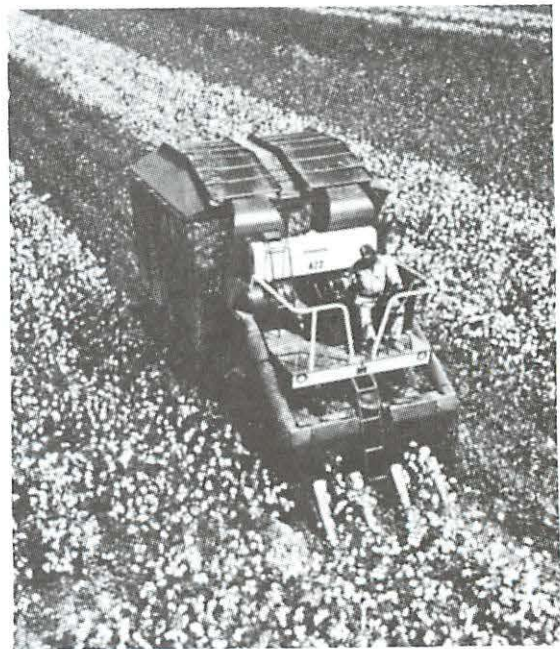
a WIC bureaucrat in one state announced that there would be no new recipients for the following year even though the state's health department had discovered that only four percent of the women who had qualified for the program were actually receiving food.

At times one WIC administrative area would have extra funds that were not needed, but regulations would not allow this money to be transferred to another area that had run out. Only people who lived in that district could receive the food. Therefore, although a person might be starving, if he had a different zip code, he would still be ineligible.

3 GREED IS INTENSIFIED.

• FARM POLICIES

One consequence of unwise farm policies is that they have encouraged immoral and irresponsible behavior. Government programs have led farmers to make some foolish decisions that will ultimately be harmful to the nation's economy, to consumers, and most of all to the farmers themselves.



U.S. Department of Agriculture

The USDA allowed cotton growers in one state to claim the unplanted strips between the rows of cotton as idle land so they could qualify for higher payments.

• **Deception.** The easy availability of huge quantities of government giveaway funds has made lying too

big a temptation for many farmers to resist. In one federal program that encouraged farmers to cut production in the early 1980s, for example, benefits were based on acres planted in previous years. Some farmers claimed fields that were ineligible, and some included land that they did not even own!

• **Indebtedness.** The ongoing nature of these programs has also fostered financial irresponsibility. After many years of being subsidized, farmers had begun to feel that the government would always be there to help them out in a pinch. In the 1970s when prices were high and export markets were strong, they demonstrated their faith in the federal bigger-is-better philosophy by going deeply into debt to purchase equipment and land.

Just a few years later when inflation had moderated, these farmers found their profits being eaten up by payments on high-interest loans. At that point, not even a massive infusion of government funds (an estimated \$24 billion in 1986) could save many of the struggling farmers from drowning in debt.



U.S. Department of Agriculture—Soil Conservation Service

Shortsighted cultivation practices have been used to raise productivity and profits but have often destroyed precious topsoil and increased erosion.

• **Selfishness.** The push for ever higher levels of productivity, which has resulted from governmental control of the agricultural economy, has motivated a third type of irresponsible behavior among the farm

community—abuse of the land itself. In an effort to remain competitive, farmers have been wearing out their land by excessive use of chemicals as pesticides and fertilizers. In their shortsightedness these men are making a profit today by robbing future generations.

Even those who know that it will eventually destroy the productive potential of the soil have been encouraged by the government to resort to these harmful practices. If they had not idled so much of their land to take advantage of subsidies, they might not have been forced to artificially increase productivity beyond the level God designed the soil to support.

• FOOD PROGRAMS

The food stamp program provides many other examples of how government giveaways encourage selfishness. People can very easily pawn the food coupons for cash.

Those who have no scruples about deceiving governmental authorities have been known to use food stamps to buy houses and illegal drugs. Others have found them to be a convenient way to pay for funerals, prostitutes, and liquor. In fact, a USDA study showed that the average poor person's alcohol consumption increased by three hundred percent between 1965 and 1977.



U.S. Department of Agriculture

Soybeans, our biggest agricultural export, provide a clear illustration of how government intervention victimizes the farmer. Peanuts and soybeans were on equal footing in 1930. American farms devoted just over one million acres to each. Then the government decided to “help” the peanut growers with price supports and production controls. Soybean farmers had to fend for themselves on the open market.



U.S. Department of Agriculture

Now peanuts are grown on 1.4 million acres, but soybeans occupy more than 65 million acres. Corn and wheat exports have fallen off in recent years, but more and more soybeans are sold abroad. The only significant difference is that corn and wheat are heavily subsidized. A recent magazine editorial carried the headline "Why Washington Should Stop Killing Agriculture With Kindness."

4 SELF-WORTH IS DAMAGED.

• FARM POLICIES

In the early days of the United States, the leaders had to make a choice. They could follow the old European land system, in which a few powerful landholders owned the vast majority of the property and a large peasant class did the actual labor. The other option was to build a more democratic society in which independent farmers owned relatively small areas of land and worked it themselves.

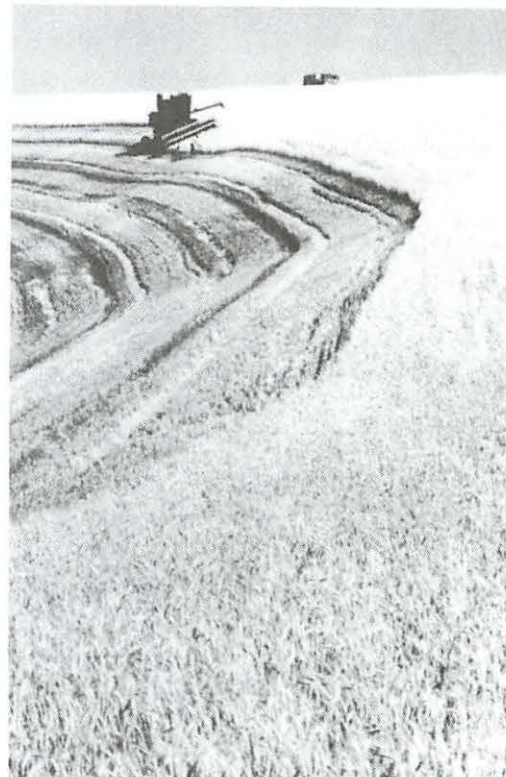
Thomas Jefferson supported the second alternative because he believed that "those who labor in the earth are the chosen people of God, if ever He had a chosen people, whose breasts He has made His peculiar deposit for substantial and genuine virtue." Until the twentieth century, Jefferson's view fairly well described the reality of American agriculture.

Today, however, government subsidy programs attack a farmer's self-worth by undermining his independence. More and more of the average farmer's decisions are influenced or controlled by USDA regulations and requirements. In determining

what crops to grow, how many acres to plant, and when to sell his harvest, he cannot afford to ignore federal policies.

If he signs an agreement with the government not to plant a certain number of acres, the government often controls what he may or may not do with the idle land. Compelled by tight competition to increase productivity, many farmers have also sacrificed their independence to the banks from which they have borrowed large sums of money.

This combination of red tape and indebtedness has fostered the sort of slave mentality Scripture warns about: "*The rich ruleth over the poor, and the borrower is servant to the lender*" (Proverbs 22:7).



U.S. Department of Agriculture

Increasingly bound up by federal regulations and eligibility requirements, farmers are no longer free to make decisions independently.

In the future, advanced technology may further erode the farmer's self-worth by making it feasible for the government to exercise even more control.

In 1967, a former Secretary of Agriculture predicted that by the year 2000, satellites would play a major role in agriculture. He speculated about how such a system might operate:

"While the farmers of tomorrow study reports in their air-conditioned offices, relieved at last of the physical drudgery and occupational anxiety so traditionally theirs, and the Secretary of Agriculture takes unaccustomed ease at his desk in Washington, these shining space satellites, equipped with the most sophisticated remote sensing instruments, are supplying the information needed to make key decisions.

"Information gathered from throughout the world will be transmitted to computers for analysis and immediate use. The soils of the world will have been inventoried, and each crop will be grown either on the soil best suited for it, or on soil chemically modified for maximum productivity. . . .

"Through information gathered by the satellites, the government will be able to make accurate predictions to guide marketing and distribution of farm products to avoid waste and local shortages and surpluses."

In effect, he was saying that the government would analyze and strictly control all farming by its own overall plan. The effect on the farmer's self-worth would be the same as socialism, for that is what he was describing.

• FOOD PROGRAMS

Having to ask for government assistance injures a person's self-concept. The Physicians Task Force on Hunger recently found that even though the need for food assistance was on the increase in the United States, the number of people receiving food stamps fell by 2.5 million between 1981 and 1985.

These statistics meant that only two-thirds of the people who qualified for the program were receiving benefits. The task force viewed this decline as partly the result of pride. People who were eligible for aid were too ashamed to ask for it.

A father feels that he is less of a man if he cannot provide food for his family. In many cases, he also loses the respect of his wife and children. When the government takes over his responsibility, he feels less obligated to remain with the family. Divorce and broken homes result.

A child's sense of self-worth can be seriously threatened by government assistance programs, too. For example, the regulations of the National School Lunch program prohibit school officials from publicly identifying which children are receiving free



U.S. Department of Agriculture

This child, like millions of other participants in the billion-dollar National School Lunch Program, is being taught to regard the federal government as a reliable provider of daily nutrition.

or reduced-price meals. In practice, however, some schools issued different colored lunch tickets to pupils in the program, setting the stage for peer ridicule.

On the other hand, the same regulations do not allow schools to have students sweep floors or clean chalkboards in order to earn their lunch. The rationale is that such work would be demeaning. On the contrary, it is the handout system, not honest labor, that is demeaning. For example, welfare mothers complained that they could not get their teenage sons to go to the distribution center to pick up free commodities because the boys were ashamed to be seen there by their friends.

5 INITIATIVE IS DESTROYED.

• FARM POLICIES

Farmers' dependence on subsidies for more than half a century has almost killed the incentive for diligent and skillful labor. Why should a farmer plant and cultivate a field when the government will pay him the same amount or more to let it lie unproductive? The way to make a profit, it seems is

not to work harder but to become more adept at squeezing every possible dollar out of Uncle Sam. The demoralizing effect of these policies may be as much to blame for the steady decline in the farm population as economic pressures.



U.S. Department of Agriculture

Soft, white wheat is loaded on barges for export. The overseas demand for U.S. grain was boosted during the 1970s by drought conditions and crop failures in the Soviet Union and elsewhere.

During the 1970s, surpluses started decreasing because foreign markets for agricultural products were growing somewhat faster than domestic productivity was. Farm prices began to catch up with and even pass federal price support levels. Even though the inflation that kept prices up also made it more expensive for farmers to buy seed, fertilizer, and equipment, the government began to lower the subsidies.

When overseas demand for U.S. farm products declined, however, the government raised the price supports again. Payments rapidly escalated so that in the early 1980s the director of the federal budget complained that we were “spending more for farm subsidies than we are for welfare for the entire poverty population of the country.”

Increasing the price supports caused already gigantic government-owned surpluses to pile up at an alarming rate. Productivity continued to climb, and a series of bumper crop years resulted in a crisis for farmers.

Even though to a great extent these problems arose because Depression-Era economic strategies



UPI

John R. Block was Secretary of Agriculture when the Payment-in-Kind program was established in 1983.

had become permanent farm policies, the government reacted with a “new” approach that was really more of the same. Labeled *Payment in Kind* (PIK), this program gave government surplus crops to farmers who would agree to leave their land idle. The farmers could then sell the crop on the market—at government-subsidized prices, of course.

Nearly \$10 billion worth of commodities were given away in 1983 in addition to the \$19 billion spent on other farm subsidies. PIK motivated farmers to keep some 48 million acres of crop land out of production that year. That is an area roughly the size of the state of Nebraska. Other USDA programs were in effect as well. The combination idled a total of 77 million acres—one third of all the eligible crop land in the nation!

Because of this unexpectedly high level of participation in the program, the government actually ran out of surpluses to give to farmers. This dilemma created a ridiculous situation in which many farmers were, in effect, required to grow the crops which they would then receive as payment for not growing crops.

PIK was a short-term program designed to eliminate surpluses. The same year it went into effect, God caused a natural “production cut” by sending the worst drought in half a century. As a result the program was a boon to some farmers, but the long-term effects will be mostly negative.

• **Employment.** So much farmland was left unplanted that hundreds of seed, fertilizer, and farm implement dealers were driven out of business. An estimated 250,000 jobs were lost on farms and in farm-related industries. An unknown number of these workers began drawing unemployment compensation and eventually joined the welfare rolls.

• **Environment.** Over half of the unplanted land was left unprotected from erosion, inevitably resulting in the loss of a great deal of valuable topsoil.

• **Trade.** The PIK program, in combination with the 1983 drought, caused such a steep rise in prices that the United States was at a disadvantage in world markets. At the same time American farmers were cutting grain production, for example, foreign production rose to a record high. In 1986, overseas farm sales were still slipping, and for the first time in fifteen years agricultural imports exceeded exports.

• **Agriculture.** Perhaps the most devastating effect of PIK was the message it sent to American farmers. For several years, the government had been trying to decrease its intervention in the agricultural economy, but PIK was not just a temporary reversal of that policy. Instead it was a reaffirmation that the federal government still stands ready to bail out the farmer whenever times get hard.

• FOOD PROGRAMS

This weakening of work incentives fostered by the dole affects farmers in another way. Many farmers have complained that food stamps have made it hard for them to find people who are willing to harvest their crops. This should come as no surprise, though; it is built right into the system. Any increase in income results in a cut in food stamp benefits. The system penalizes personal initiative rather than encouraging it.

Researchers have discovered that when food stamps are available, people who have some wage income will actually choose to work fewer hours. The decrease in wages is usually approximately the same as the amount of food assistance, so that the two, in effect, cancel each other out.

Work requirements have been part of the food stamp program almost since the beginning, but the USDA has failed to enforce them consistently. One government report focused on a group of 620 program participants. They were of age and able to work. All were required to register for employment, but only three were actually hired.

Although not a state, Puerto Rico receives millions of dollars in federal benefits for its citizens. The island's economy clearly illustrates the impact of dependence on food assistance programs. In the mid-1970s nearly sixty percent of the residents were receiving food stamps.



Tom Hollyman, Photo Researchers

A countryside scene in Puerto Rico. United States farm subsidies to Puerto Rican farmers has had a negative effect upon the entire culture.

An editorial in a San Juan newspaper lamented that the food stamp program was "cultivating, encouraging, and abetting a generation of loafers in Puerto Rico." According to the Puerto Rico Manufacturers Association, some industries were on the verge of going out of business simply because they could not find people willing to work, in spite of the island's twenty-percent unemployment rate.

The agricultural policies and food programs of the United States Department of Agriculture clearly illustrate that when a government takes responsibility for something that God did not intend for it to control, the results are disastrous.



Ewing Galloway

Economic disorder spreads because this course of action contradicts the God-given principle of personal property as the incentive for each man to do his own work. Political and social discord arises because every special interest group wants its share of the government subsidy "pie." The environment is permanently damaged because greed motivates people to ignore the long-term consequences of their decisions. Worst of all, spiritual bankruptcy ruins the lives of citizens who stop looking to God for their daily bread.

In short, America has long been sowing the seeds of unscriptural dependence on the government as the provider of daily bread. Now farmers, the poor, and the rest of society as well are beginning to reap a harvest of economic chaos, sociopolitical upheaval, environmental devastation, and spiritual emptiness.



The Washington Post

The farm lobby has long been one of the most powerful influences in Washington, but in recent years the economic crisis facing farmers has motivated them to become more vocal in demanding their rights.

PROJECT

Match the following Scriptures with the five consequences of government's taking over the role of providing daily bread. Discover how God's program of provision guards against each of the consequences. (Hint: There are two Proverbs and one New Testament reference for each consequence.)

1 Waste is encouraged. KH ± ☒ ☒ ☐

2 Distribution is inequitable. MCE ☒ ☐ ☐

3 Greed is intensified. LFJ ☒ ☐ ☐

4 Self-worth is damaged. NBD ☐ ☐ ☐

5 Initiative is destroyed. DAG ☒ ☐ ☐

A. Proverbs 10:4 5 5

B. Proverbs 10:5 4 4

C. Proverbs 11:26 2 2

D. Proverbs 12:24 4 4

E. Proverbs 13:23 5 E

F. Proverbs 15:27 3 3

G. Proverbs 16:26 5

H. Proverbs 18:9 1

I. Proverbs 21:20 1

J. Proverbs 21:25 3

K. John 6:12-13 1

L. Acts 4:32-5:4 3

M. Acts 6:1 2

N. I Thessalonians 4:11-12 4 4

O. II Thessalonians 3:10-12 5

Date completed _____ Evaluation _____



MEDICINE RESOURCE

HOW DOES INCREASING OUR INTAKE OF DAILY BREAD DECREASE THE RISK OF DISEASE?



H. Armstrong Roberts

Bran muffins are a tasty source of fiber in the diet.

A wide variety of nutritious and delicious products can be made from whole grain. In the thanksgiving offering the nation of Israel was required to bring to the Lord the following types of bread:

"If he offer it for a thanksgiving, then he shall offer with the sacrifice of thanksgiving unleavened cakes mingled with oil, and unleavened wafers anointed with oil, and cakes mingled with oil, of fine flour, fried.

"Besides the cakes, he shall offer for his offering leavened bread with the sacrifice of thanksgiving of his peace offerings" (Leviticus 7:12-13).

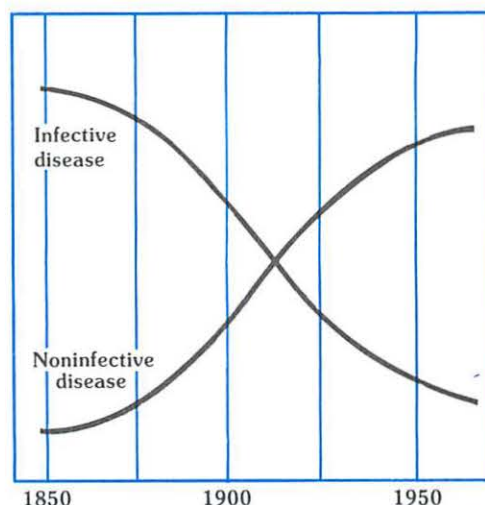
Whole-grain bread is one of the "fiber-rich" foods that is essential to physical health. Ten years ago the importance of fiber in our diets was not understood. Today, however, its function of preventing diseases is well documented. Scientific studies and research papers have grown from ten a year to five hundred a year.

One of the early pioneers in this field is Dr. Denis Burkitt of London, England. Dr. Burkitt is a Christian surgeon who has won worldwide acclaim for his work in cancer research and for confirming the link between many of the "killer diseases" of the Western world and the lack of fiber in our diets.

Dr. Burkitt explains in the following material the importance of fiber in the diet and the consequences when it is neglected.

"Before we consider how we may reduce our risk to the most common diseases in this country, let us for a moment see how we conquered infective disease as a major cause of death.

"Until World War II, infective disease was the most common cause of death throughout the world. It no longer is in economically developed countries, having fallen steadily from the middle of the last century right down to just before World War II."



The fall of infective disease and the rise of non-infective disease in the United States

"Effective treatment for infective disease did not come in until this time, when the mortality rates had fallen to almost their present level. The sulphonamides came in when I was a resident in the 1930s. Antibiotics came in after the Second World War. So we have to be honest and say treatment had nothing to do with reducing disease at all.

"What was it that conquered infective disease? It was two things: first, increasing our resistance to disease by better nutrition; and second, immunization. You've probably all been immunized against poliomyelitis, diphtheria, measles, and other diseases which you can almost abolish by immunization.

"The second means of reducing disease was getting rid of the causative factors. This meant clean water, clean milk, and adequate sewage disposal. Treatment had nothing to do with it. Treatment is

very important for sick people, but it doesn't reduce disease.

"As we got rid of infective disease, a new set of diseases, which we now call "Western diseases," because they occur commonly only in more affluent societies, have taken their place. Let us look at some of the major diseases in North America today."

1 THE FIBER IN DAILY BREAD GREATLY REDUCES CONSTIPATION—A MAJOR CAUSE OF "WESTERN DISEASES."

"I want to begin without any apology with constipation. It has been a totally neglected subject in the medical profession. It is something I have studied all over the world with great intensity. As a nation, on world standards, we are a totally constipated nation from the Atlantic coast to the Pacific coast. Britain is also a totally constipated nation. We don't realize how serious this is. Constipation is basic to a whole list of diseases.

"When I say we are a constipated nation, I mean this: the average American adult passes eighty to one hundred twenty (80–120) grams of stool a day. The average person in Africa, India, the Pacific

Islands, and other countries passes three hundred to five hundred (300–500) grams of stool a day!

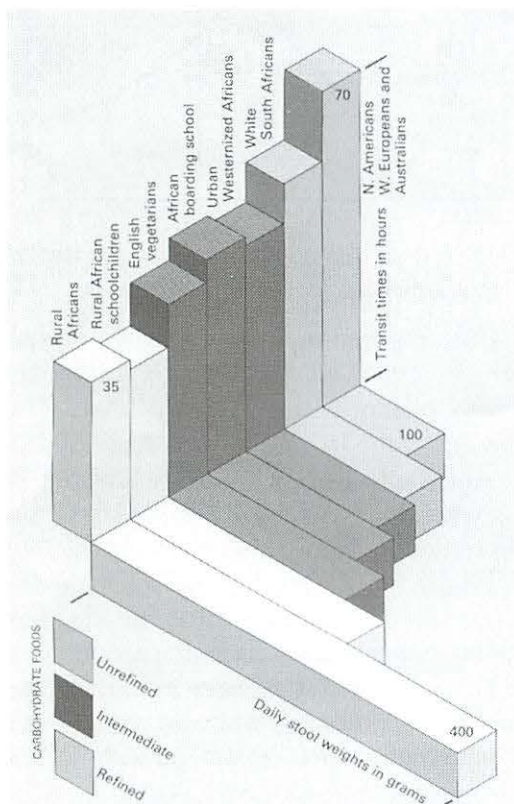
"High stool weights and low intestinal transit times are associated with low occurrence of Western diseases.

"This is very significant because your chance of a long, healthy life is more directly related to the amount of stool you pass daily than to your blood pressure, your glucose tolerance curve, your serum cholesterol, and many other things the doctor examines when you go to see him. Most doctors never inquire about how much stool you are passing.

"I can say this with the utmost confidence. I have asked thousands of doctors about this, and they confirm that constipation is due to one factor only—lack of fiber in the diet. If we could get fiber, and grain fiber in particular, back into the diet of North Americans, there would no longer be any place for a laxative industry, which is one of your most flourishing industries at the moment!"



Fiber greatly increases stool weight and decreases constipation because it absorbs water much like the sponge in the picture above.

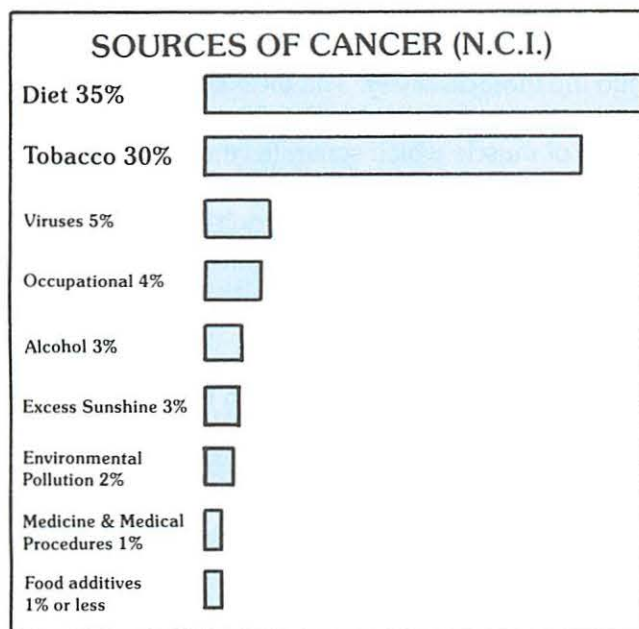


High-fiber foods eaten by rural Africans produce a stool weight four times that of North Americans who eat refined foods. The fiber-rich stool passes in half the time.

Researchers at the University of Lund, Sweden, have found that fiber in the diet can absorb known compounds that cause cancer.

The compounds are *quinolines*, which are very potent carcinogens (cancer-causing agents). Various types of fiber, from wheat and other grains, were examined for their absorption capacity and found to leach out up to twenty percent of these compounds. Flour from sorghum grain consistently absorbed fifty percent.

The presence of fiber is, therefore, important for three reasons. First, it increases and softens the bulk of the stool by absorbing water; second, it decreases the transit time of the stool in the intestinal tract; and third, it absorbs cancer-causing compounds which may be in the diet. All three of these reduce the contact of carcinogens with the intestinal lining.



At least 65% of cancer in North America is caused by factors directly under our control.

"Here are figures from the National Cancer Institute (NCI), the leading cancer research center in the world, showing the relative importance of different causes of cancer. You will note that two are way, way, above all others in importance. The food we eat is responsible for over thirty percent, probably, of our total cancer. Tobacco is responsible for another third."

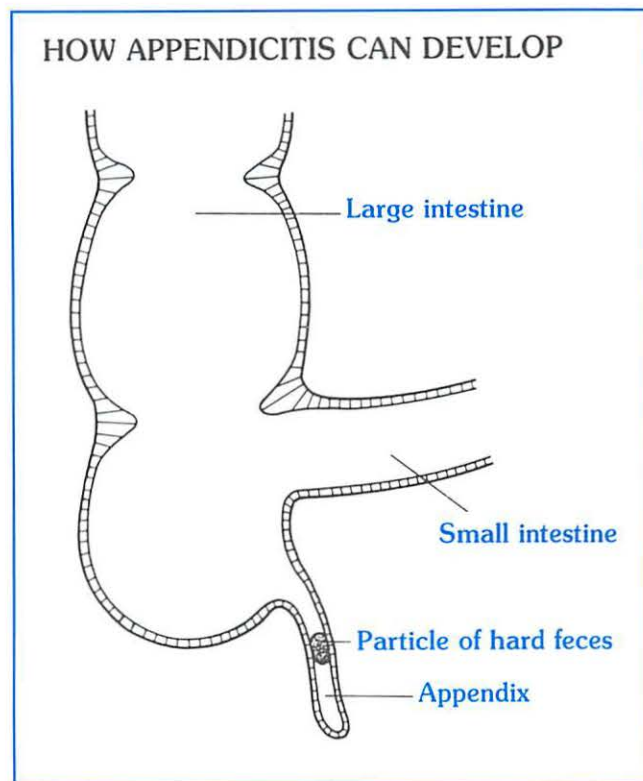
2 DAILY BREAD ALMOST ELIMINATES THE DANGER OF APPENDICITIS.

"Appendicitis is still the most common abdominal emergency in North America. Appendicitis is almost unknown among populations which live on a traditional fiber diet. It is equally common in black and white Americans today, as all these diseases are.

"When I first went out to Africa over thirty years ago, I remember writing a paper on acute abdominal surgery in that country. I wrote based on the experience of a six-hundred-bed teaching hospital. At that time we were seeing two patients a year with appendicitis! A hospital that size in the United States would see two patients a day! I could talk for hours about the worldwide distribution of appendicitis.

"When African soldiers joined British troops in North Africa during the Second World War and began eating British soldiers' rations, they began

for the first time to get appendicitis. The few people today who get appendicitis in Africa are always the educated people who learned our English eating habits."

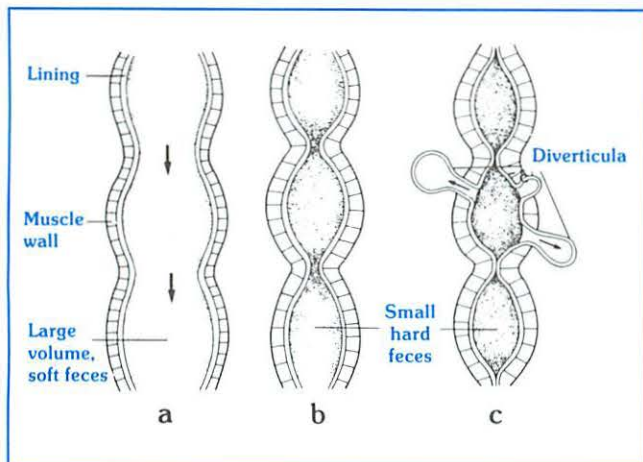


A hard stool increases the risk of appendicitis.

"We used to teach our students never to diagnose appendicitis in an African patient, no matter what the clinical symptoms, unless the patient could speak English. Nobody gets appendicitis until after they learn English in East Africa. Speaking English is an index of an African's contact with modern Western culture. The only hypothesis for which we have sound medical evidence as a cause of appendicitis is lack of fiber in the diet."

3 DAILY BREAD REMOVES THE CAUSE OF DIVERTICULAR DISEASE.

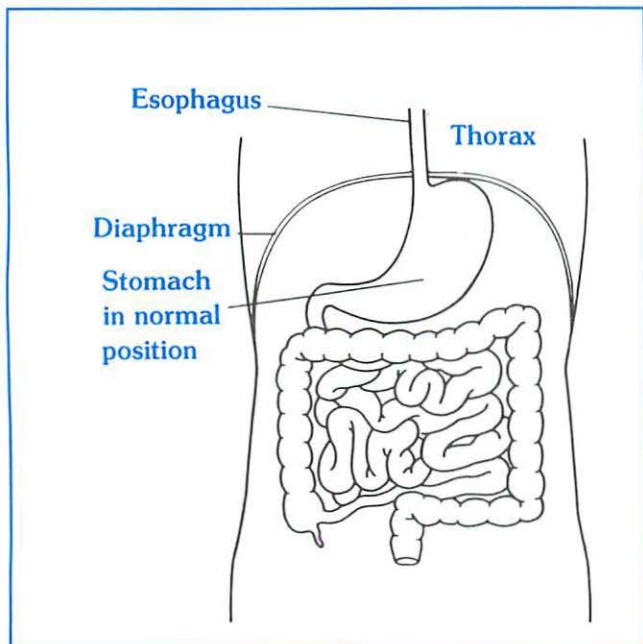
"There is virtually no diverticular disease in Africa. I never saw one patient in twenty years of surgical practice. However, diverticular disease affects about one in three in North America. This, we believe, is due solely to a lack of fiber in the diet, and regrettably, until about ten years ago, people with diverticular disease were treated by giving them a diet low in fiber. Now, of course, the whole treatment has been totally reversed."



Cross sections of the colon

- On a high-fiber diet the large volume, soft fecal content is propelled along easily.
- On a low-fiber diet the small, hard fecal content needs extra effort from the bowel wall to ensure its onward passage; consequently, the muscles become thicker and stronger.
- Increased pressure is caused within the cavity of the gut, and this can eventually force pouches of the lining through the muscle wall. These are the diverticula.

4 DAILY BREAD AVOIDS THE COMPLICATION WHICH RESULTS IN HIATAL HERNIA.

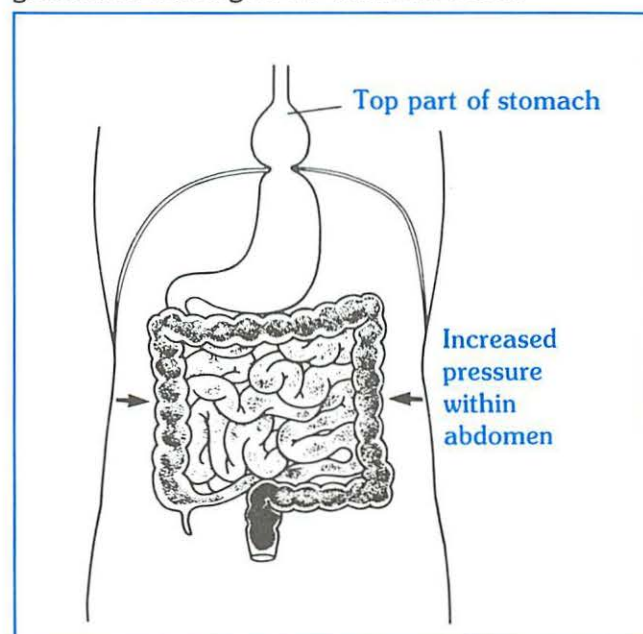


Normal positions of the esophagus, stomach, and diaphragm

"Hiatal hernia is a disease in which the stomach is pushed upward out of the abdomen and into the thoracic cavity. The thorax is the part of the body above the diaphragm. The diaphragm is a sheet of muscle which separates the abdomen from the thorax.

"In North America, one adult in four is affected by hiatal hernia. A common symptom is heartburn. A radiological study in West Africa of a thousand adults revealed only four cases.

"We have just published a paper within the last few months showing that both hiatal hernia and heartburn have exactly the same prevalence in this country, whether the person is white or black. So again, these conditions have nothing to do with genes and nothing to do with skin color."



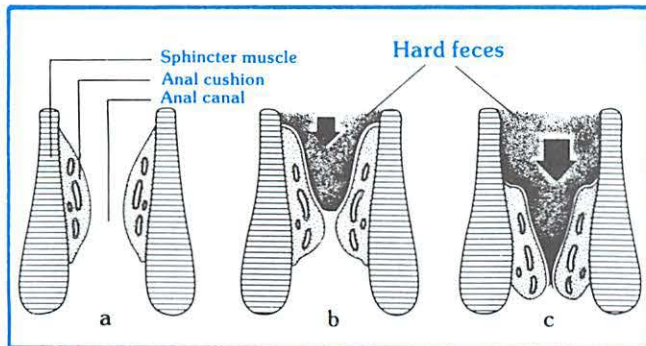
This diagram shows the upward displacement of the top of the stomach through the hole in the diaphragm that normally contains only the esophagus. This displacement, resulting in part from increased pressure within the abdomen, constitutes a hiatal hernia.

"When the muscles of the abdominal wall contract to assist in the evacuation of a constipated stool, pressure within the abdomen is increased, and as a result, the upper end of the stomach is squeezed up out of the abdomen into the thorax. This is the only explanation for the cause of hiatal hernia that is consistent with the distribution of the disease, although it cannot yet be considered a proven cause.

"Hiatal hernia is associated not only in its geographical distribution, but also in individual patients with both diverticular disease and gallstones. This observation suggests that all three diseases share some common cause." (*Don't Forget Fibre in Your Diet*, Dr. Denis Burkitt, pages 56–58)

5 DAILY BREAD PREVENTS HEMORRHOIDS AND IS THE BEST TREATMENT FOR THEM.

"Hemorrhoids, or piles, will be experienced by about half the population of America. Hemorrhoids are actually totally normal structures; they aren't pathological at all. You rarely get complications except in the presence of a fiber-depleted diet, and fiber is, then, the best treatment for hemorrhoids."



- The anal cushions in their normal position to prevent escape of feces.
- The passage of hard feces forces the anal cushions down.
- Eventually anal cushions can be forced out of place, causing pain and other complications.

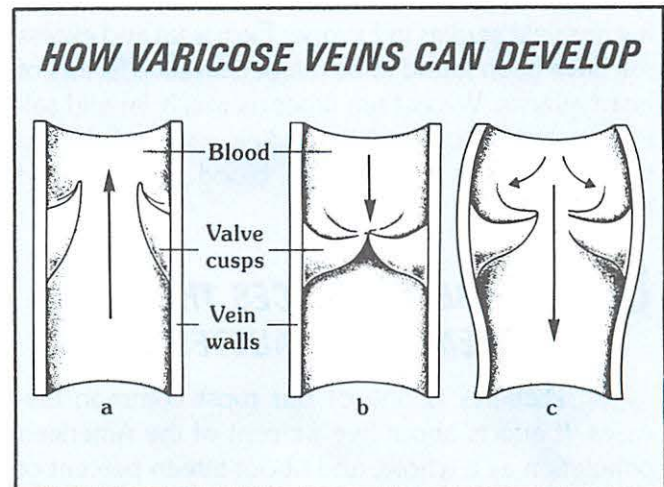
6 DAILY BREAD REDUCES THE RISK OF DEVELOPING VARICOSE VEINS.

"Varicose veins are also a disease of Western culture. Every lady is interested in varicose veins because fifty percent of American women over the age of forty in total community surveys in North America have been shown to have varicose veins—one in every two!

"A recent study in New Guinea examined eight hundred adult women and found only one with a small varicose vein. This is a disease which occurs all over the world, but it is always more common in affluent societies. I am afraid we still teach our students in medical schools that varicose veins are caused by pregnancy, as if the human race had not yet adjusted to getting pregnant.

"Now this, of course, is rubbish! The countries with the most pregnancies always have the least varicose veins. In all the major surveys we have done in India, the varicose veins were more common

in men than in women, and men do not all that often get pregnant! But still, this teaching continues to go from textbook to textbook."



- The valves ensure that blood flows only in one direction—back to the heart.
- The valves prevent backflow as the valve cusps meet each other and close the vein.
- Blood forced back down over a period of time stretches the walls so that the valves are unable to meet.

7 DAILY BREAD DECREASES THE DANGER OF HEART DISEASE.

"Now let us come to the major killer of all. One man in almost every three in North America today is going to die of heart disease unless we change our way of life. Deaths from heart disease have fallen twenty percent in the last ten years in this country, in Finland, and in Australia, but not yet in Britain.

"Heart disease, like all these diseases, is just as common in black Americans as in white Americans. Yet our medical students in Africa did not see one patient with heart disease during their five years of medical training. Sir William Osler, the great physician of Johns Hopkins in Baltimore, wrote in 1920 that on an average, you should expect to see one patient per hospital per year suffering from *angina pectoris* (ann-JIE-nuh PECK-torr-iss), and now it is the most common cause of death in the nation! Angina pectoris is a disease of the heart characterized by insufficient blood supply to the heart muscle. The symptoms are brief episodes of chest pain.

"So it has to be due to something in our way of life. We are never going to solve the problem by

plastic hearts, transplanted hearts, and all this kind of thing. We have to find the cause and eradicate it.

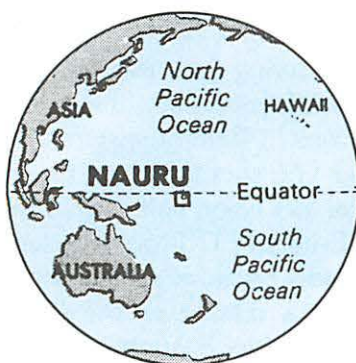
"The fiber of grain has been shown to be a protection against heart attacks in two different twenty-year studies in Europe. Excess fat and excess salt have been found to be major causative factors of heart attacks. We eat ten times as much fat and salt as populations on traditional diets eat, and this intake contributes to our high blood pressure and heart disease."

8 DAILY BREAD REDUCES THE OCCURRENCE OF DIABETES.

"Diabetes is one of our most common diseases. It affects about five percent of the American population as a whole, and about fifteen percent of the population over age sixty. There are no reported cases in African bushmen or Eskimos. Diabetes is nonexistent in undomesticated animals, but it is always common among human beings who live with a different diet than that of their forefathers.

"There is a genetic factor in diabetes, but there is an even stronger dietetic factor. I am going to give you one example of this. I could give you several, but one might serve to show you the strength of diet as opposed to the effect of heredity in the occurrence of diabetes.

"There is a little island in the Pacific called Nauru. It is only twelve miles around. In 1952, the people lived on the local produce of the island, and diabetes was very rare. Then the people discovered that the island was covered with phosphates, due to the droppings of birds over long periods of time. They sold the phosphates, and they became the second wealthiest people in the world after the Arabs in the Middle East. They have a larger per capita income than the United States.



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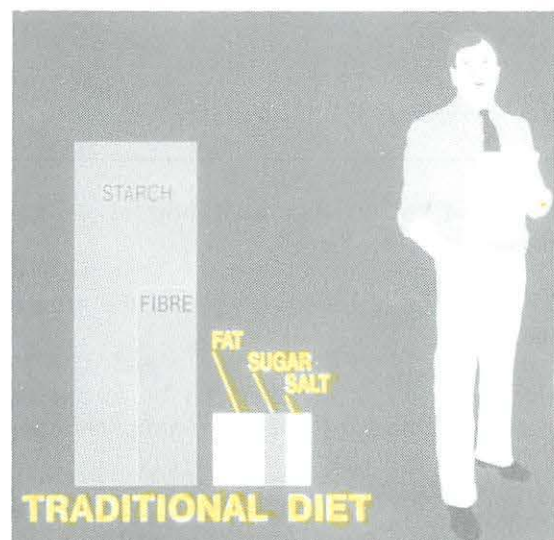
"So when they realized that they were wealthy, they said, 'We had better keep up with those clever people in America. They have airplanes; they have hi-fi radios; they have lots of leisure time; they have all sorts of things, so certainly they must know what

to eat!' And that's the biggest mistake they ever made in their lives! They copied the Western world,

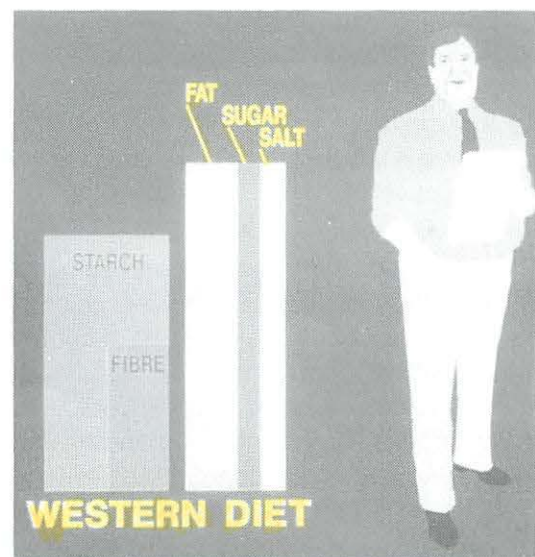
started to import food, and began to eat all the kinds of food that we eat.

"What has happened? Over forty percent of the adult population of Nauru, male and female, are now diabetics! They have also learned how to get appendicitis! That's one of the early diseases you get when you change your way of life. They have learned how to get obese—that comes in early, too. They will not get heart disease or gallstones for another thirty years. Their grandchildren will get hiatal hernias and diverticular disease. They have started on the slippery slope of Western Diseases."

9 AN INCREASE IN DAILY BREAD DECREASES OBESITY.



With this diet, Western diseases are rare.



With this diet, obesity and Western diseases are common.

"Obesity in another of our major diseases. It also is a disease of modern Western culture. You never see the common man depicted as fat in ancient Greek art, Egyptian art, or Roman art—perhaps the potentate or the king, but not the common man.

"However, obesity is an extremely common problem in North America today, and the great fallacy has been to tell people to cut out carbohydrates. We have never found a community who developed an obesity problem until after they had reduced their carbohydrates. It is fat and sugar that contribute to obesity, never starch!"

How to lose weight by eating more bread

According to a *Reader's Digest* article called, "Eat More, Weigh Less, Feel Great."

"... The secret of permanent weight control is not in diet at all. It is a well-balanced, lifetime eating plan based on good, tasty foods that have good, maximum nutritional value....

"When we decide to shed unwanted weight, many of us automatically cut out bread, potatoes, rice, and spaghetti. We subsist instead on steak and salad, cottage cheese, and fruit, tuna salad and tomatoes, or some similar combination of a high-protein animal food and a low-calorie fruit or vegetable.

"Yet studies show that such a high-protein, low-carbohydrate diet can make us fatter faster than a low-protein, high (or complex) carbohydrate diet will. Foods high in complex carbohydrates—starches—contain less fat, and up to a third of their calories are excreted undigested.

"Starchy foods, especially unrefined grains such as whole wheat, rye, oats, and brown rice, also satisfy the appetite because they come with fiber, a low-calorie belly-filler.

"Olaf Mickelsen, then a professor of food science and human nutrition at Michigan State University, demonstrated that bread can actually help control weight. Overweight young men were told to consume twelve slices of bread a day in addition to whatever else they ate. They were also advised to minimize their consumption of high-calorie foods like doughnuts and to avoid alcohol.

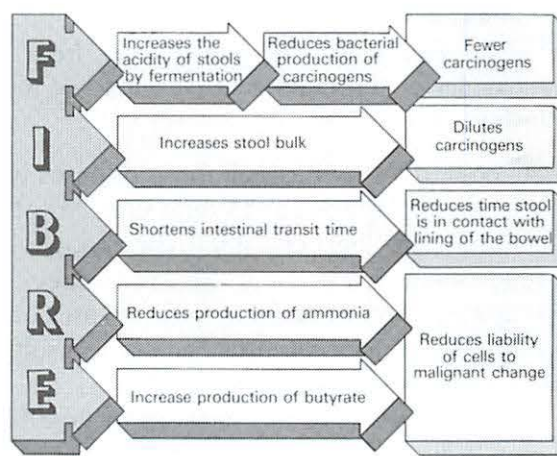
"After eight weeks the men who ate ordinary white bread had lost an average of 13.7 pounds, while those who ate high-fiber bread had lost an average of 19.4 pounds."

Reader's Digest, November 1987, pages 159-162

10 DAILY BREAD ELIMINATES LARGE BOWEL CANCER.

"Large bowel cancer has been a particular hobby of mine for many years. It is a cancer closely related to economic development. It is twelve times as common in black Americans as in Africans, and we believe it is certainly due to diet.

"Convincing evidence suggests that fiber in the diet protects from large bowel cancer, and excess fat in the diet is causative. This cancer is the second most common cause of cancer death in North America, after cancer of the lung."



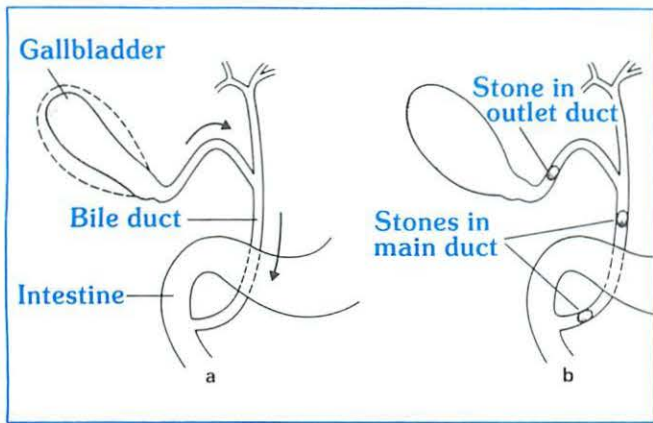
How fiber protects against bowel cancer

11 DAILY BREAD PREVENTS GALLSTONES.

"All these diseases which we are talking about are common in the same situation. They are all between ten and a hundred times as common in North America as they are in Africa, so they are due to something which is characteristic of the American way of life.

"They are equally common between black Americans and white Americans, and yet in South Africa, they are as common in the white population as they are here. They are, however, rare in the black population there because the black population lives in a different way.

"Gallstones are one of the most common complaints of women. About one woman in three in North America is going to develop gallstones. Black and white women are the same. There are virtually no gallstones in Africa, however. Only twice in a twenty-year surgical practice did I remove a gallbladder from an African woman."

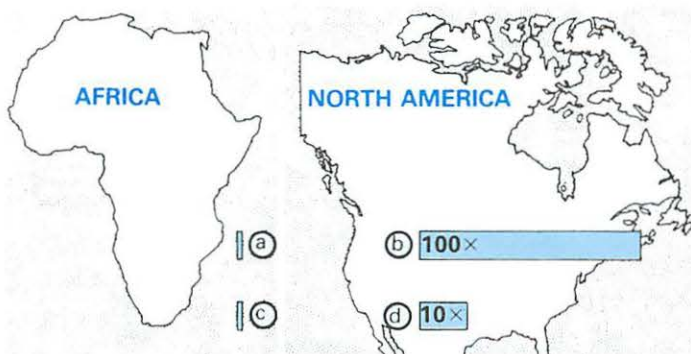


- As the gallbladder contracts, bile is squeezed into the intestine to help digestion.
- A stone can block the outlet duct from the gallbladder or the main duct carrying bile to the intestine.

"Looking to the East, all these diseases were rare in Japan until the Second World War. Now they are common in that country. The people are importing meat from New Zealand; they are importing sugar and white flour, and they are cutting down on their consumption of rice. As a result, all these diseases are increasing.

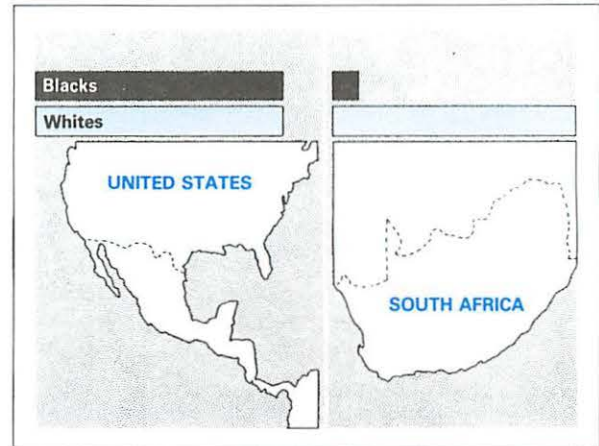
"Many Japanese over decades of time have left Japan to live in Hawaii. When they go to Hawaii, the next generation of little Japanese growing up are at the same risk as descendants of Italian, Irish, English, or Scandinavian peoples. So all this points to one thing. These diseases must be the result of the way in which we live and not primarily our genetic make-up. We can do nothing about our genes, but we can do everything about altering our way of life.

"All the diseases I have listed, have, through extensive research, been related either directly or indirectly to the digestive tract—the tract that takes the food from your mouth right through your bowel. So what controls the functions of the digestive tract? It is the food you eat!"



Blocks *a* and *b* represent the occurrence of heart disease, diverticular disease, gallstones, appendicitis,

and hiatal hernia in areas such as rural Africa (*a*) and North America (*b*). They occur about 100 times more frequently in *b* than in *a*. Varicose veins, hemorrhoids, large bowel cancer, diabetes, and obesity, represented by blocks *c* and *d*, occur about ten times more frequently in areas such as North America than in rural Africa.



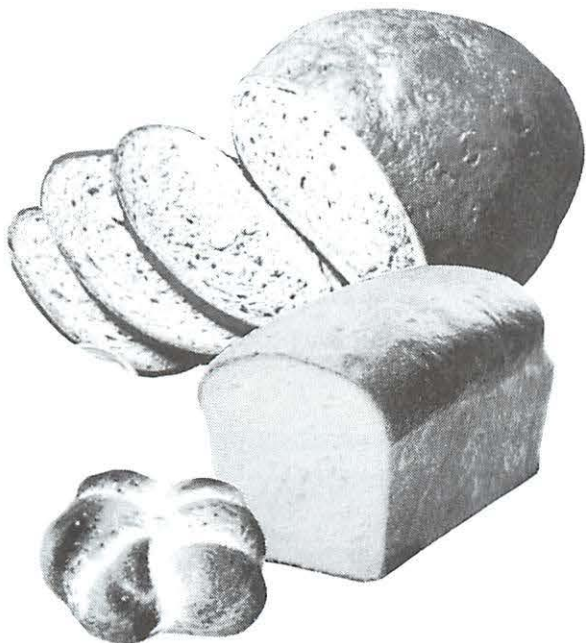
Most Americans have been led to believe that Africans do not live as long as Americans, and that this is the reason they do not contract some of the diseases we have. Dr. Burkitt gives the following reply to this false assumption:

"The life expectancy of African or Indian villagers at birth is only about forty years. This is due to the fact that up to fifty percent of them may die in the first five years of their lives.

"A recent study of the total population of South Africa confirms that if you take the relative proportions in the community, black and white, there are about fifteen times as many centenarians (those who live one hundred years or more) in the black community as in the white community.

"This fact surprises most people, and certainly rules out any argument that Africans do not get our diseases because they do not live as long as we do. Any cancer statistics we publish on Africans have been 'age-adjusted' (comparing the same age groups).

"Life expectancy in America has been revolutionized from fifty years to about seventy years. However, this has been achieved only by reducing infant mortality. Only two or three years of actual longevity has been added to the adult American."



THE DANGER OF WHITE BREAD

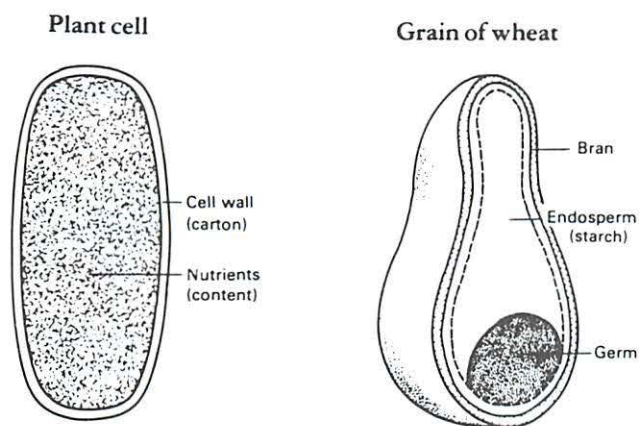
"It is significant that depleted bread was a product of the rich, not the poor. From the earliest recorded times, the production of white flour has been the goal of rich people. In ancient Egypt, a way was found to separate the vital bran and the nourishing germ from the wheat.

"In first-century Rome, the statement was made, 'You can tell the social strata of a person by the color of the bread he eats.'

"Depleted wheat certainly qualifies for the warning that is given in Proverbs 23:1,3:

'When thou sittest to eat with a ruler . . . Be not desirous of his dainties: for they are deceitful meat.'"

WHAT IS FIBER?



"Fiber is the 'skeleton' of all plants. If plants did not have fiber, they would collapse like jelly. Fiber is the wall of all plant cells. The nourishment is inside; the fiber is in the wall.

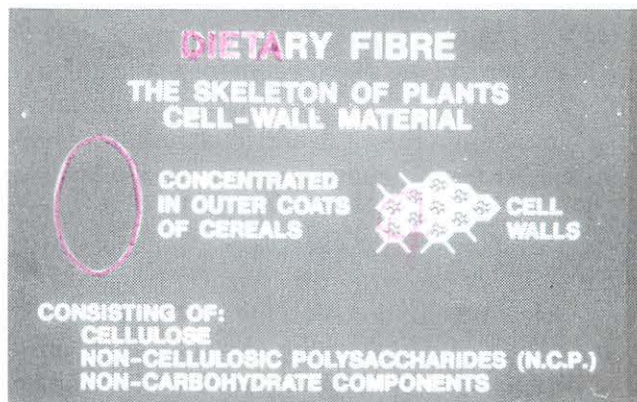
"Fiber is concentrated in the outer coats of grains of wheat, barley, or corn. From a chemical point of view, fiber consists partly of cellulose. Fiber used to be equated with cellulose, but cellulose is an unimportant part of fiber. Fiber includes also non-cellulose polysaccharides and a little bit of non-carbohydrate material.

"In the same way that a sponge holds water when put into a glass, fiber holds water when in the colon. Because fiber acts in this way, it is a total protective against constipation. Nearly all the diseases I have listed are related in varying degrees to the fact that we are a constipated nation."

"We have studies from five continents of the world regarding the dietary changes that have preceded the emergence or rise in prevalence of the diseases we have been talking about. Let us look at the results:

"There are five principle dietary changes that occur between economically poor countries and rich countries. The first is starch. Starch is what you get in bread, pasta, oats, rye, barley, noodles, and every type of plant food other than sugar.

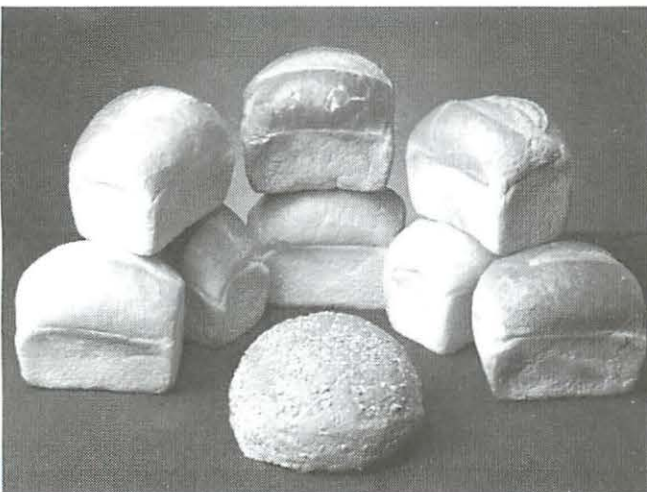
"Starch consumption always falls as people become economically developed. Third world communities get anywhere between eighty and ninety-five percent of their energy from starch. We look upon starch as the poor man's food and say, 'We are clever people now; we can get rid of our starch.' "



"Fiber is the part of plant food which is not absorbed during its passage through the small bowel. All other nutrients, as well as sugar, fat, and protein are absorbed in the small bowel.

"As a country develops, the people take fiber out of their diets because they don't understand what it is. This is a very dangerous tendency in medicine in general—just to take things out because we don't understand them. We did not understand what tonsils were until less than twenty years ago. (I speak as a repentant surgeon.) Now we know that they are important immunological organs. We did not understand them, and what did we do? We cut them out. We did not know what the appendix did, so we said, 'This is something we should not have; cut it out.'

"In the case of fiber, it has been eliminated from our diets more and more. As fiber decreased, fat in our diets has increased. We eat almost four times as much fat as people who are exempt from the diseases we want to avoid."



Eight white loaves would have the same effect for increasing stool output as one whole-grain loaf.

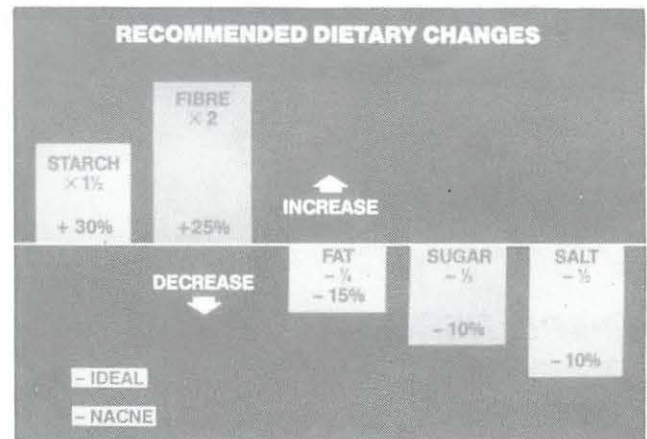
"How can we reduce our fat intake? There are three ways. First, cut down on red meat. Even the lean portions of most cuts of beef, pork, and lamb are thirty percent fat. The fat content of wild animals, however, is quite a bit less. Personally, our family goes almost entirely for fish and fowl, unless we have guests. If I were a benevolent czar making laws for my beloved people, one law would be that no one should ever, with few exceptions, eat meat twice a day.

"Second, cut down on fried foods. Look with great doubt on potato chips, because they are a tremendous source of fat. There is not a problem with having french fries once a month, but certainly not every day.

"Third, switch from whole milk, which is very high in fat, to skimmed milk, or milk which is one or two percent fat.

"Other diet adjustments which should be made to reduce the risk of disease are to eat less sugar and less salt. If we could halve our sugar intake, we would do well. Americans average two pounds of sugar per person per week, if we include all the sugar that is present in the prepared foods which we buy.

"We eat ten times as much salt as our distant ancestors ate, and there is no doubt that we would be more fit if we cut down on our salt."



"So, more starch, more fiber, less fat, less sugar, less salt—that's it in summary! As we have reduced our starch, reduced our fiber, increased our fat, sugar, and salt, the Western diseases have become more and more common.

"Now I am going to say a further word about obesity. One of the most popular books on diet ever written was Audrey Eytan's *The F-Plan Diet*. It has been a best-seller for years. The message of the book is that fiber in food protects you from getting fat. Here is how it works:

"If you were to eat three apples, it would take a lot of chewing, and it would take a long time to eat them. You would feel fairly full when you were done. If, however, you smashed up the architecture of those three apples, you would get about two-thirds of a glass of apple puree. Now, you could probably drink three glasses of apple puree, and that would be about nine apples worth of calories. You probably would not eat nine apples, however.

"If you take the fiber out of that apple puree, you are left with a third of a glass of apple juice with all the energy of those three apples. You could easily drink four glasses of apple juice. That is thirty-six apples worth, and you are certainly not likely to eat thirty-six apples."



Three apples equal one third of a glass of apple juice with all the energy (calories) of the three apples.

"The lesson is this. The food that God designed for us to eat consists of plant food containing fiber. The fiber takes longer to eat, and it takes longer to be absorbed into the bloodstream. Our stomachs are full before we've overeaten because of all the fiber and the saliva that we have swallowed. Thus, we tend not to overeat.

"If, however, you take the fiber out of your food, unless you are very disciplined, you are probably going to overeat. Fiber-depleted foods include all sugars, all fats and oils, all alcohol, and to some extent, all white flour.

"High-fiber diets are not only a protection against obesity, they also protect from diabetes because of the way they slow down the entry of energy into the digestive tract.

"Our diets in the Western world today are poor in starch and poor in fiber. I've put the fiber into the same block as the starch, because we eat the fiber and the starch together in plant foods like corn, wheat, oats, rye, barley, peas, beans, and so on. On the other hand, we have gone way up in our fat consumption. The result is that Western diseases are common. We have to retrace our steps and eat far more fiber and far more starch.

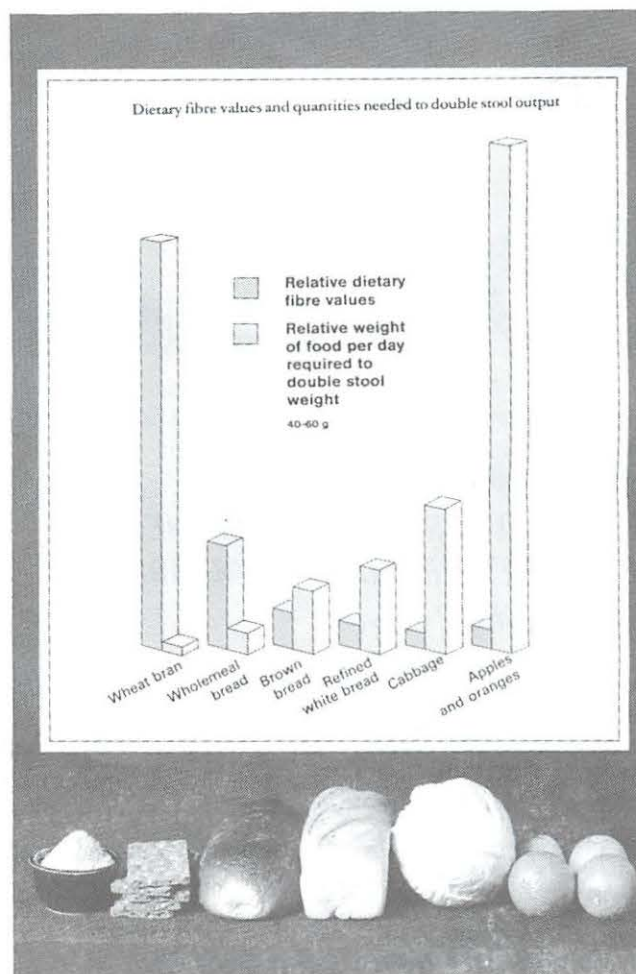
"Our forefathers used to eat over a pound of bread a day. It was high-extraction bread, brown bread, or whole-meal bread. We eat less than a quarter pound of bread a day. Our ancestors ate far more potatoes than we do. Let me tell you that before the Irish potato famine in the second half of the 1850s, the average laborer lived on a pint of milk and ten pounds of potatoes a day!

"The potato is one of the most complete foods to meet the needs of man. But you might say, 'If a laborer lived on ten pounds of potatoes a day, he

must have gotten quite obese.' This was by no means the case. He was in great demand as a mercenary in European armies, because he was a big, tough, fighting man.

"So get back to bread; get back to potatoes! Cut way down on the fat, way down on the sugar, way down on the salt, and you're going to reduce your risk of all the diseases which we are now discussing.

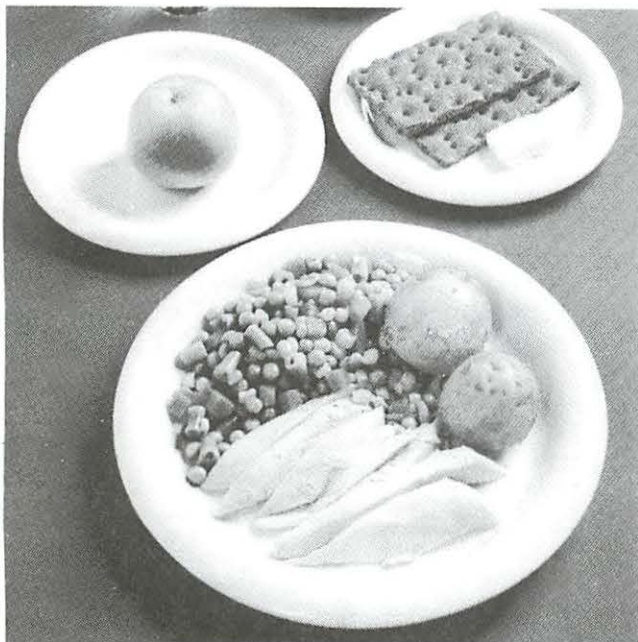
"Over twelve countries have now come out with recommendations as to the food changes we should make. All of these recommendations are the same in principle. We ought to eat more fiber, and particularly grain fiber as in whole-meal bread, brown bread, or breakfast cereals."



"Some people think that if they eat a lot of salad they are eating fiber. Salad has various good things in it, but hardly any fiber. To put this in supermarket terms, we need to eat more rice, oats, barley, wheat, bread, corn, and the various breakfast cereals which are fiber-rich. (Some cereals are not.) Peas and beans are a marvelous fiber diet; fruits and vegetables are also good.

"Now you may wonder why I have not mentioned protein. If we look after our starch and our fiber and cut down on fat, the protein will look after itself!

"I must emphasize that contrary to what many people believe, health is not determined by doctors and medicines; health is determined by the way we live."



The above meal (fruit, bread, vegetables, potatoes, and baked white meat) is rich in fiber, while containing little fat and no added sugar.

HOW DID JESUS CONFIRM THE NEED FOR DAILY BREAD BY COMPARING IT TO HIMSELF?

Many times during His earthly ministry, Jesus made the analogy between Himself and bread. In John 6:35, Jesus clearly said: "... I am the bread of life. ..." By His using bread as an illustration of Himself, we are able to search out the obvious analogies between Christ and bread. Here are some of them.

1. Bread is a basic source of life.

Amino acids are the building blocks of proteins. Researchers have identified twenty amino acids which our bodies need in order to build tissue. There are at least eight amino acids which our bodies cannot make; these we must get from the foods we eat.

Almost all of the amino acids which are essential for life are contained in various grains. Thus, wheat germ is known as a "complete protein." Jesus affirmed the completeness of bread when He said:

"... Man shall not live by bread alone, but by every word that proceedeth out of the mouth of God" (Matthew 4:4).

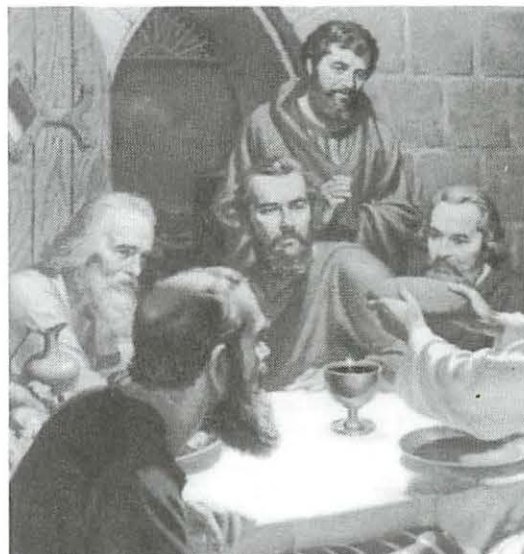
2. When bread is neglected, diseases occur.

In order to maintain the health and strength of the nation of Israel while they were in the wilderness, God gave them "daily bread." Jesus referred to this when He stated, "I am the living bread which came down from heaven: if any man eat of this bread, he shall live for ever ..." (John 6:51).

3. Bread without its basic elements is ineffective.

Perhaps the most important relationship which Christ made between Himself and bread is the need for accepting the whole essence of both. The heart of the grain is the wheat germ and the outer shell is the bran.

"... Verily, verily, I say unto you, Except ye eat the flesh of the Son of Man, and drink His blood, you have no life in you ... For my flesh is meat indeed, and my blood is drink indeed ... so he that eateth me, even he shall live by me. This is that bread which came down from heaven ..." (John 6:53-58).



Bible Art Series, Standard Publishing, Cincinnati

At the Last Supper, Jesus took bread, broke it, and said, "... This is My body" (Matthew 26:26).

PROJECT

Discuss the possibility of making your own whole-grain bread or purchasing it on a regular basis from another family who is baking it.

Date completed _____ Evaluation _____