

Why
do we
Eat?



ESSENTIAL

micro
nutrients

<1g



MACRO
nutrients

>1g



ESSENTIAL Nutrients

MICRONUTRIENTS

Vitamins/Minerals

MACRONUTRIENTS

Carbohydrates

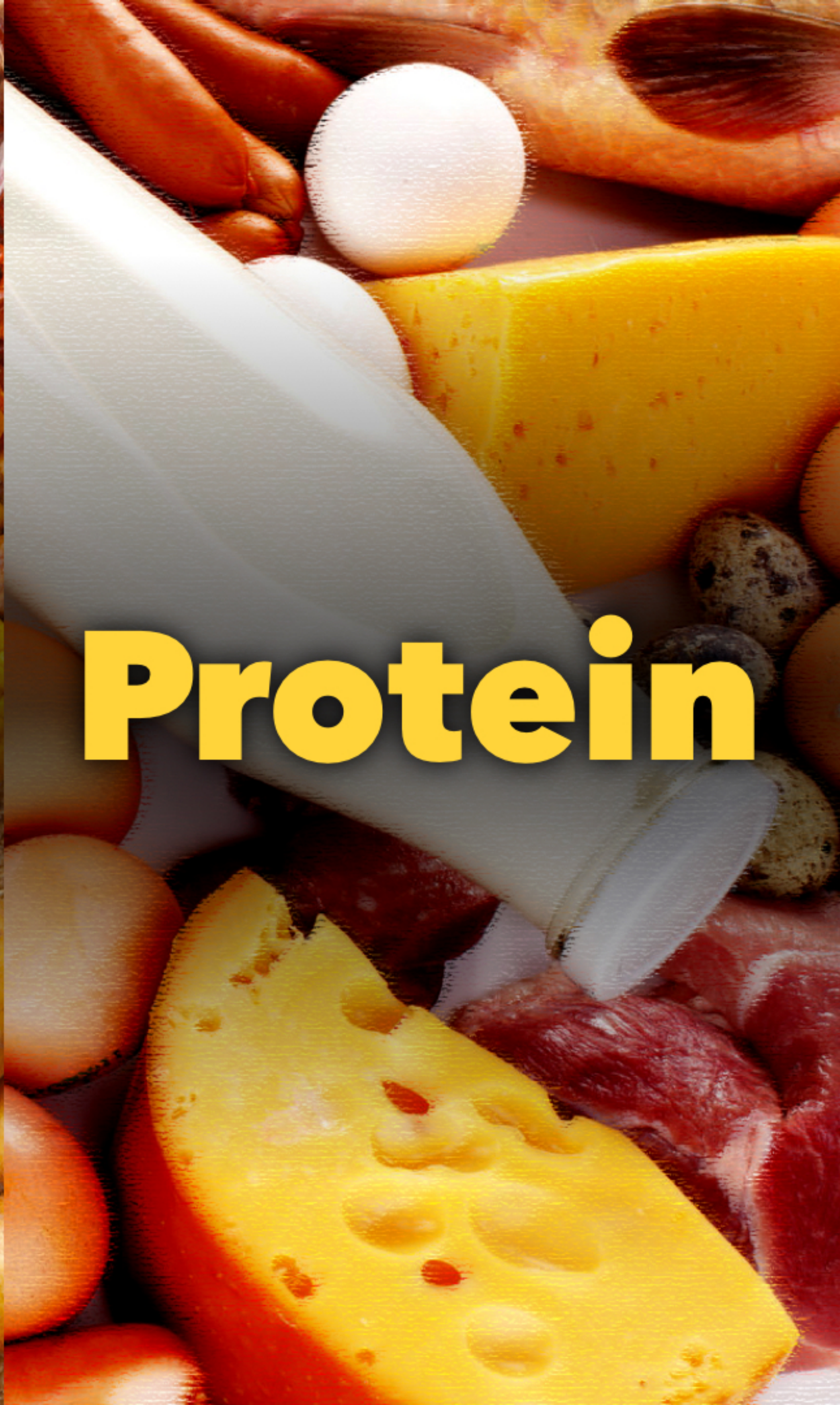
Fatty Acids

Protein





Carbs



Protein



Fats

Carbs

A collage of various carbohydrate-rich foods including bread, pasta, rice, and grains. The background features a loaf of sliced bread, a pile of spaghetti with melted cheese, a pile of buckwheat, a pile of rice, and a pile of yellow tortellini.

Carbohydrates are the **primary source of energy** for our bodies

Protein

Protein provides the building blocks for muscle and enzymes

Fat

FAT is necessary for normal cell and organ development, and is critical for nerve conduction



How
do we get the
nutrients
we need from
our
food?



Digestion



Digestion is the breakdown of large food molecules into smaller food molecules.

The nutrients from food can then pass from the small intestine into the blood stream.



Mechanical

Digestion

Chemical



Mechanical Digestion

Mechanical digestion involves **PHYSICALLY BREAKING FOOD DOWN** into smaller particles

MOST mechanical digestion takes place in the mouth

Chemical Digestion

Digestive **ENZYMES** split up large food molecules into their "building block" components

They are targeted to break up specific **MACRONUTRIENTS**

Enzyme Class	Macronutrient
Amylase	Carbohydrate
Protease and Peptidase	Protein
Lipase	Fat

MOUTH

Mechanical Digestion

Food is broken down into smaller pieces by the chewing, tearing, slicing and biting action of the teeth.

Chemical Digestion

Salivary glands release amylase, which begins to break down starch into simple sugars.



ESOPHAGUS

Partially digested food is pushed down from the mouth into the stomach by muscles in the esophagus that alternately contract and relax (peristalsis).



STOMACH

A woman with long brown hair, wearing a blue jacket over a dark blue top and black leggings, is sitting on a wooden bench outdoors. She is holding a green apple in her right hand. A blue callout box with a white border points from the text on the left to her stomach area. The background is a blurred green forest.

Mechanical Digestion

The stomach is like a mixer, churning and mashing together all the food into smaller and smaller pieces.

Chemical Digestion

Complex proteins are broken down into simpler proteins by pepsin (protease).

Stomach acid denatures proteins, and destroy bacteria and viruses in the food.

Little digestion of carbohydrates or fats occur in the stomach.

SMALL INTESTINES

Chemical Digestion

Three digestive juices are secreted into the small intestines to complete digestion:

Bile from the liver which breaks fats into small droplets for easier digestion;

Pancreatic juice which contains several enzymes, including amylase, protease, peptidase, and lipase;

Intestinal enzymes from the small intestines which contain lactase, sucrase, maltase to break down disaccharides into monosacharrides.



LARGE INTESTINES

As food passes through the large intestine, water is absorbed and taken back into the body.

Remaining undigested food will be passed to the rectum and anus for removal by the body.





Consequences of **Poor** Digestion

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Poor or incomplete digestion can lead to occasional **bloating, gas, intestinal discomfort,** and **nutrient deficiencies.**

Other signs of Poor Digestion

No desire to eat breakfast

Occasional meal-related bloating

Fatty food intolerance

Flatulence

Unexplained nausea

Stomach upset by taking vitamins

(Heavily) coated tongue

Brittle fingernails

20%

of the US population
experience **Reflux**
(heartburn) symptoms
at least **weekly**

Between

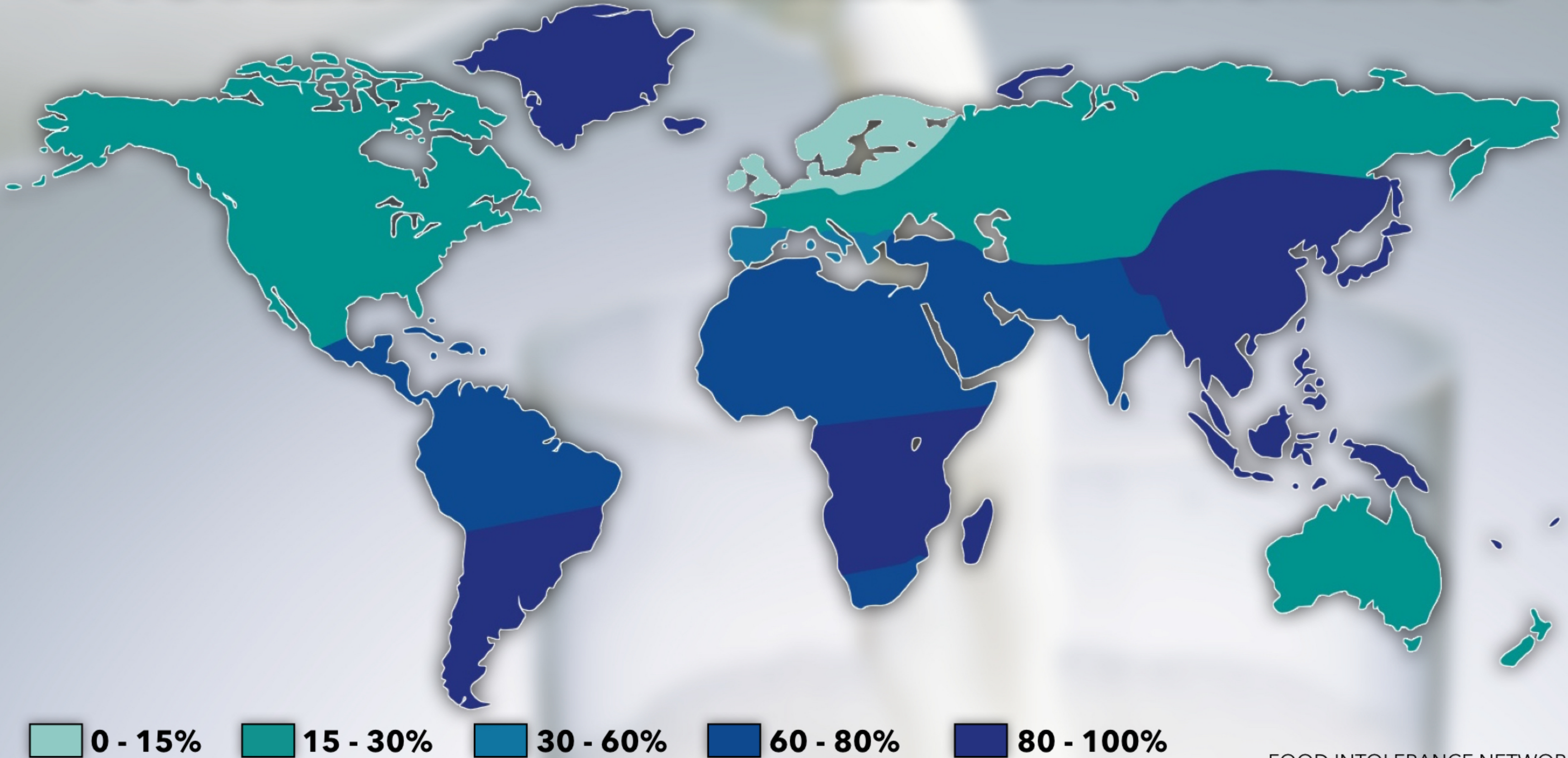
30 and **50**

million Americans are
lactose intolerant

National Institutes of Health, U.S. Department of Health and Human Services. Opportunities and Challenges in Digestive Diseases Research: Recommendations of the National Commission on Digestive Diseases. Bethesda, MD: National Institutes of Health; 2009. NIH Publication 08-6514.

El-Serag HB, Petersen NJ, Carter J, et al. Gastroesophageal reflux among different racial groups in the United States. Gastroenterology. 2004;126:1692-1699.

Prevalence of Lactose Intolerance



Support Healthy Digestion

Stay hydrated

Eat more fiber

Exercise regularly

Maintain a healthy weight

Support Healthy Digestion

The **digestive system** is a very important part of the body. Without it, it isn't possible to get the nutrients needed to grow and repair properly and stay youthful looking and healthy.

USANA[®]

Digestive Enzyme





Comprehensive digestive enzyme supplement

Wide range of **supplemental enzymes** that support the breakdown of dietary carbohydrates, fat, protein, lactose, and cellulose (from plants)

Encourages more **complete digestion** to support the absorption of macronutrients

Contains artichoke extract, which may help to **relieve** occasional stomach upset, especially after large meals



Each tablet Contains:

Alpha-Amylase (3,000 DU)	33 mg
Bromelain (750,000 PU)	25 mg
Protease (15,000 HUT)	25 mg
Lipase (350 LipU)	17.5 mg
Lactase (1,000 ALU)	11.5 mg
Papain (250,000 PU)	5 mg
Cellulase (130 CU)	3.25 mg
Artichoke	25 mg



Alpha-amylase, lactase, and **cellulase** assist in the breakdown of carbohydrates and fiber

Bromelain, protease, and **papain** support the digestion of proteins

Lipase supports the digestion of fats

Plus, USANA's supplement is unique because it contains **artichoke extract,** which may help relieve occasional stomach upset, especially after a large meal

the
USANA
difference





the USANA difference

USANA manufactures our dietary supplements in our own **STATE-OF-THE-ART** (FDA-registered and TGA-certified) **MANUFACTURING FACILITY**, using quality standards that are above and beyond what is required for dietary supplements.



the
USANA
difference

POTENCY

Guaranteed that what is on the label is in the product

COMPOSITION

Contains what it's supposed to and in the right proportions

QUALITY

Meets all specified expectations

IDENTITY

Ingredients meet label claim

STRENGTH

Offers the correct concentration of ingredients

PURITY

Free from impurities or contaminants



USANA

ADHERES to
Good Manufacturing Practices
set forth by NSF International



A man in a white lab coat is shown from the chest up, looking upwards and to the right with a thoughtful expression. He is holding a silver pen to his forehead. The background is a soft, out-of-focus white.

USANA

is a member of the United Natural Product Alliance - an association of dietary supplement and functional food companies that share a commitment to provide consumers with natural health products of superior **QUALITY**, **BENEFIT** and **RELIABILITY**.

USANA®



THANK YOU!

