

Health-Promoting Ingredients

Winning with well-being

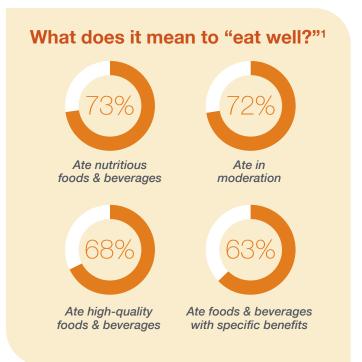
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Consciousness rising of diet's role in personal well-being

Today's consumers have access to an unprecedented degree of information about the foods and beverages they consume... and they're hungry for more. Recognizing the impact nutritional choices can have on general well-being, as well as specific health goals, they're considering their choices carefully.



Healthier habits

In a recent survey, 74% of respondents said they had made changes in the past year to improve their health, with 43% saying they specifically made changes to their diet.² Their purchase behavior is being influenced by information on product labels:

- 7 in 10 are very likely to check Nutrition Facts Panel and front-of-package summary
- 6 in 10 are very likely to check ingredient list to avoid a certain ingredient³

Ingredients that boost healthy credentials

It's not enough for a product to be "good for you" it has to taste great, too. With a full portfolio of labelfriendly ingredients, plus deep formulation and regulatory expertise, Cargill can help you win with products that support well-being.

Goals are both broad and specific

"Being healthy" can be a uniquely individual concept. But some of the top issues that consumers are looking to address through diet include:





health







Specific dietary needs



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Sugar reduction

Though they love its sweet taste, consumers are realizing that too much sugar and excess calories can impact their health, whether by contributing to excess weight or other chronic health issues, such as high blood pressure, diabetes or liver disease.

SUGAR UNDER SCRUTINY

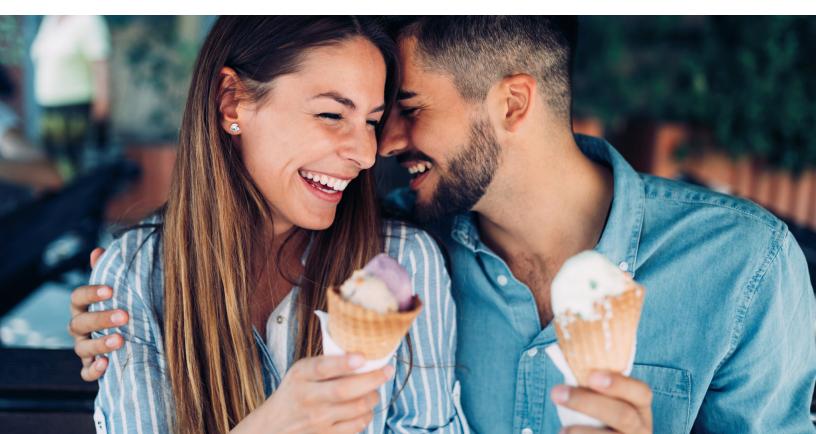
74% are trying to limit/avoid sugar⁴ 30%

believe sugar calories most likely to cause weight gain⁵

Unsurpassed sugar reduction expertise

From beverages to dairy, bakery and beyond, Cargill's sugar reduction ingredients offer clean, sweet taste, a satisfying sensory experience and up to 100% sugar reduction.

- Stevia sweeteners: Truvia[®] and ViaTech[®] leaf-based extracts and EverSweet[™] stevia sweetener, produced sustainably via fermentation,* can reduce sugar by up to 100%, even in challenging applications.
- **Zerose**[®] **erythritol:** Zero-calorie bulk sweetener looks and tastes like sugar; complements high-intensity sweeteners.
- **Pectin:** Our plant-based pectin adds texture and mouthfeel to reduced-sugar applications.
- VerSyra[™] reduced-sugar syrups: Label-friendly syrups offer a 1:1 replacement for higher-sugar syrups, while reducing sugar content by up to 50%.



Added protein

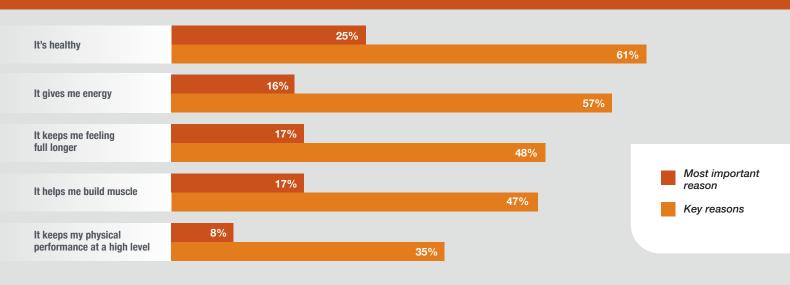
More and more, people are pumped for protein – recognizing its value in nutrition and health. One in four consumers says more protein in the diet is always better, and at least six in ten are at least somewhat likely to check the ingredient list for protein.⁶



Plant protein enjoying mainstream appeal

With plant-based ingredients being perceived as a better-for-you option, and formulation advances meeting taste expectations, plant-based proteins are gaining wide acceptance. Cargill's plant protein portfolio includes:

- **PURIS[™] pea protein:** A robust source of 80% protein with creamy, delicious flavor and a smooth mouthfeel.[†]
- **Prolía® and Prosante® soy proteins:** Versatile, economical sources of protein, with similar texture, structure and chewing experience to meat.
- Wheat gluten: Offers a minimum of 75% protein with a neutral flavor profile and versatile functionality.
- **Corn protein** (in development): Delivers 70-90% protein from a familiar source.



CONSUMER REASONS FOR SEEKING PROTEIN⁷

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Digestive health

Healthy gut, healthy self. Digestive health has become a top priority for 8 in 10 consumers, according to a report from HealthFocus International,⁸ as they recognize the integral role the microbiome plays in overall health.



Trust your gut

From prebiotics to postbiotics to dietary fiber, Cargill's innovative ingredients not only support digestive health; they can also improve product texture and add authentic appeal.

- Oliggo-Fiber® chicory root fiber: A naturally sourced** fructan from chicory root that provides a source of beneficial prebiotic fiber to supplement dietary fiber and aid in meeting dietary fiber recommendations. It also supports bone health and weight management, can be used for sugar/calorie reduction and enhances texture/flavor.
- MaizeWise[®] whole grain corn: 100% whole-grain corn products, including flour, meal and masa, provide a source of dietary fiber and meet the FDA whole-grain claim.
- EpiCor[®] postbiotic: A clinically researched, whole-food fermentate which creates unique beneficial metabolites. Research indicates it may support a healthy gut ecology.[‡]

Perceived role of digestive health

(extremely/very important)9





Heart health

Cardiovascular disease is the number-one cause of death in the U.S., attributed to 1 in every 4 deaths annually.¹⁰ While certain health conditions and family history can raise one's risk of high cholesterol, healthy lifestyle choices like exercise and diet can help manage the risk.

38% 🎔

of Americans have high cholesterol (>200mg/dl), which can increase the risk of heart disease and stroke.¹¹

Plant sterols: part of a heart-healthy lifestyle

These plant-based, bioactive sterols have been clinically proven to lower cholesterol, are backed by an FDA health claim and recommended by the National Cholesterol Education Program (NCEP) of the National Institutes of Health.

• **CoroWise**[®] **plant sterols:** Cargill's leading brand of plant sterols offers versatile formulation in products ranging from breads to margarines, juices and supplements, with no impact on taste or texture.

Immune health

The body's immune system helps defend against disease and infection by producing antibodies to fight pathogens. Adequate nutrition supports a healthy immune system; however, even small deficiencies in certain nutrients can weaken the body's immune response.¹²

Immunity-boosting ingredients

Beyond supplements, Cargill immune-supporting ingredients can enhance the healthy credentials of a variety of bars, beverages, confections and more.

- EpiCor[®] postbiotic: A whole-food fermentate with beneficial metabolites which helps support a strong immune system.
 EpiCor's one-of-a-kind postbiotic acts like a multivitamin for your immune system.^{®‡}
- Vitamin E (d-alpha tocopherol): Our plant-sourced vitamin E is more readily utilized by the body than synthetic forms to promote healthy cells and blood vessels, while supporting immune function.

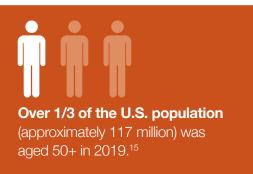
Immune health is the #1 reason for adults under the age of 35 taking supplements.¹³



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Cognitive health

Healthy cognitive function is important throughout the lifespan. With increased age comes greater risk for memory loss and dementia; however, recent research has shown that a healthy lifestyle can protect brain health as people age.¹⁴



Supplementing healthy habits

Choline is an essential nutrient that plays a key role in health and development throughout the lifespan, including supporting normal development of the brain and nervous system, healthy brain function and healthy liver function.

• **High-PC lecithin:** Cargill plant-based lecithins are a source of phosphatidylcholine (PC), which is the primary form of choline in foods. Lecithin also offers label-friendly emulsifying, stabilizing and texture enhancement.

Oral health

There's growing evidence linking poor oral health – and particularly gum disease – to several chronic diseases, including diabetes, heart disease and stroke.¹⁶ According to the CDC, 16.9% of children aged 5-19 and 31.6% of adults aged 20-44 have untreated dental caries.¹⁷

Sugar reduction and smile appeal

Paired with good oral hygiene and reduced sugar consumption, research has shown that consuming products with erythritol can reduce dental plaque and bacteria that contribute to tooth decay.

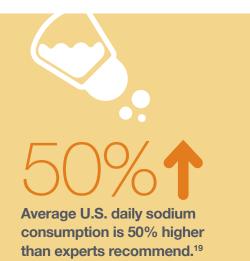
• Zerose[®] erythritol: A zero-calorie bulk sweetener that looks and tastes like sugar; clinically shown to reduce plaque and risk of cavities.





Sodium reduction

Diets high in sodium have been associated with increased risk of developing high blood pressure, a major cause of stroke and heart disease. To address the concern, the U.S. Food and Drug Administration (FDA) issued draft voluntary guidelines for the food industry to gradually reduce the amount of sodium in prepared, processed and packaged foods.¹⁸



Sodium solutions

Reducing salt is often just the first step in meeting total sodium reduction goals. Cargill partners with customers to identify the right combination of ingredients to achieve sensory and nutritional goals.

- **Potassium Pro® potassium salt:** A go-to solution for reducing sodium in foods, potassium chloride provides a salty flavor, as well as potassium enrichment to foods.
- Alberger[®] salts: High-purity, uniquely shaped natural crystalline salts with increased surface area and low bulk density for improved solubility, absorption and increased salty flavor.
- FlakeSelect[®] sodium chloride/potassium chloride blends: An innovative product line that leverages patent-pending technology to combine and agglomerate ingredients, reducing sodium while retaining many of the functions of salt.



Glucose management

More than 1 in 10 Americans (or 34.2 million) live with diabetes, while another 1 in 3 have prediabetes.²⁰ Complications can be serious and costly, including nerve damage, kidney disease, high blood pressure and vision problems.



Delicious ways to skip the sugar

Cargill offers a full portfolio of ingredients to create products with a lower glycemic response:

- Stevia sweeteners: Truvia[®] and ViaTech[®] leaf-based extracts and EverSweet[™] stevia sweetener, produced sustainably via fermentation,* can reduce sugar by up to 100%, even in challenging applications.
- **Zerose**[®] erythritol: Zero-calorie bulk sweetener looks and tastes like sugar; complements high-intensity sweeteners.
- **Maltidex**[®] **maltitol:** A clean-tasting polyol that can reduce sugar by up to 40%, and offers 1:1 replacement for sugar.
- Xtend[®] sucromalt: Adds the sweetness and body of sugar, but with a lower glycemic impact.
- Oliggo-Fiber[®] chicory root fiber: A naturally sourced** fructan from chicory root that provides a source of beneficial prebiotic fiber, supports sugar reduction and enhances texture/flavor.

A 13-year study showed annual increases in youth diabetes cases (younger than 20 years)²¹





How can we help?

Cargill is committed to working with food and beverage manufacturers to improve the healthfulness of their products.

To learn more, contact us at 1-800-932-0544, <u>customerservice@cargill.com</u> or visit <u>cargill.com</u>.



* https://www.cargill.com/food-beverage/na/eversweet-sustainability

- **FDA has not defined natural. Contact Cargill for source and processing information.
- [↑] PURIS[™] Pea Protein is a licensed trademark of PURIS Proteins, a Cargill strategic partner.
- [‡] Produced by Embria Health Sciences, a Cargill partner.

SOURCES:

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- ² Innova Consumer Lifestyle & Attitudes Survey, 2019.
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- ⁵ Ibid., IFIC. Among college-educated respondents.
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- ⁹ Ibid, HealthFocus International.
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- ²⁰ Centers for Disease Control and Prevention. National Diabetes Statistics.
- ²¹ SEARCH for Diabetes in Youth study, cited on CDC.gov, "Rates of new Diagnosed Cases of Type 1 and Type 2 Diabetes Continue to Rise Among Children, Teens."

