SESSION I: INTERNATIONAL PERSPECTIVES October 13, 2005 - 2:00 p.m. - 4:00 p.m. Role of Agribusiness in Enhanced Nutrition

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This session is about the challenges of overnutrition and obesity. The conference overall, however, is looking at the dual global challenges of malnutrition, or undernutrition, and obesity. Under and overnutrition are linked for a very simple reason. Public discussion of both issues too often poses a false dichotomy.

For the undernourished, the debate seems to be trade versus aid when clearly both are needed. For the overnourished, critics replay a version of nature versus nurture. Nature advocates pit personal responsibility against genetic predisposition. On the nurture side, the food police – maybe that's a Cargill term; that's what we call them – the food police want to parse the problem as good versus bad food. They battle those who believe it is the portion, not the food, that is the obesity poison.

These false dichotomies conceal the complexity of the issues. They also risk delays and false starts in resolving the problems of hunger and obesity. Rather than either or, we need to recognize the both and. Ending hunger requires both aid and trade. Resolving obesity means addressing both nature and nurture. So let me elaborate.

Hunger has many faces. It can be temporary or chronic. It can mean caloric inadequacy or nutrient deficiency. It can be rooted in failed governments or poorly performing markets. It can be lessening, as in Asia, or worsening, as in Africa, and so on. The essential point, however, is that ending hunger requires both the alleviation of specific problems and the eradication of its root cause, poverty.

Aid is well suited for relieving temporary deprivation through emergency assistance. It can also correct nutrient deficiencies through fortification. It's often a necessary response to dislocations from civil unrest, stagnant economies, or natural disasters, as Hurricane Katrina so vividly illustrated.

Aid is not well suited for addressing chronic hunger or caloric deficits, as donors will wary of it. Moreover, free food displaces commercial production and development. Aid also does not help well-functioning markets get established and grow.

On the other hand, aid is well suited for emergencies, which by their nature reflect a breakdown of normal communications and commerce. It's also ineffective in serving populations that simply lack the means to help themselves, whether they're infants and children or whether it's the abject

poor. Trade works best in jump-starting economic development, creating wider markets for local production and increasing the reliability of supplies.

Cargill's approach to hunger issues attempts to reflect these hard-earned lessons. We support emergency relief efforts of all sorts, including through our contributions and volunteer activities with the International Red Cross, Second Harvest and the like.

We've also launched major partnerships with CARE and the World Food Program to target vulnerable populations like women, infants and children in impoverished regions.

We've also collaborated with the Center for Disease Control on their Flour Fortification Initiative and with the World Initiative on Soy and Human Health. The Flour Fortification Initiative goal is to fortify with iron and folic acid 70% of global flour produced in roller mills by the year 2008. Our World Initiative on Soy and Human Health project in Honduras seeks to demonstrate the value of increased soy protein in the diets of women, children and HIV patients.

Helping ensure accessible nutrients, nutritious, safe food and supplies is a primary goal of our corporate philanthropy.

So moving from aid to trade. Cargill has long sought ambitious agricultural trade reform. The DOHA development round represents the best opportunity of a generation to make real progress, and I was very pleased to see our government put proposals on the table and to see that Europe responded, that they didn't go far enough or go further. We shall see, but it's a great start, and I'm glad that both of them have spoken up.

It's clear that developed countries have much to contribute to the process. They're being called on to reduce trade-distorting domestic supports through cuts in levels and changes in the structure of their own farm programs. They're also being asked to end export subsidies and monopolies and to lower market access barriers.

But we need to avoid a false dichotomy here as well. Too many believe that developing countries have nothing to contribute to liberalization and little to gain from their own reforms. Nothing could be further from the truth. While the average U.S. agricultural tariff under WTO is about 12%, it's over 30% in the EU, over 50% in Japan, 66% in Korea, and more than 110% in India. The world average is more than five times the U.S. level.

A recent study by Kim Anderson and Will Martin starkly underlines the need for mutual reductions and trade distortions. Comprehensive global trade reform would increase global welfare by nearly \$300 billion a year. Developing countries stand to capture 45% of this gain. Agricultural trade reform accounts for roughly two thirds of the welfare gain for developing countries, or about a hundred billion dollars. And 92% of the agriculture trade reform benefit comes from market access improvements, making trade reform by developing countries just as important for them as is reform by developed countries.

Market access by developing countries increases their own welfare. They also will help promote the developed country reforms for these countries. It's a potential win-win for them. Developing countries should not be resisting market access concessions, rather they should exchange them for what they can gain in both trade and aid from agreeing to the reforms they need to accelerate their own development. Now let me shift from hunger to obesity. There has been growing recognition of the scope of obesity. In the United States, one in four adults and one in five children are obese. And obesity has been steadily increasing. The health threats – heart disease, diabetes and cancer – are similar to those of smoking and trending upward.

One in three Americans born in the year 2000 is likely to develop diabetes. The direct and indirect costs of diabetes to the U.S. economy already were \$132 billion in 2002. And this problem has been building for some time. Over the last thirty years, American women have increased their daily caloric intake by 21%, or 325 calories, while men have added 170 calories to an already significant 2,450-calorie base.

Public awareness, however, has really wakened only in the last few years, with U.S. media coverage of obesity tripling since 2001. It's not surgery, therefore, that a sudden discovery of a steadily growing problem has generated false dichotomies and visible villains.

The overriding false dichotomy is nature versus nurture. Are America's society's obese tendencies rooted in her physical or psychic makeup, or are they based on changing eating habits and foodstuffs. The clear answer is – both. We're eating more but exercising less. There also is mounting evidence of genetic drivers towards obesity. Similarly, we're taking more meals out of the home, and not just at fast food restaurants. And we're eating more processed foods in larger quantities.

None of this finger-pointing is likely to help us as a society to get out of this situation. Fewer jobs require physical labor, so we simply must find more ways to burn up calories, whether in the gym or just climbing stairs. Labeling foods as inherently good or bad ignores taste and, I think, common sense. All foods in moderation can be fitted into a slenderer figure. Nor does blaming portion sizes make sense; it ignores the thought processes that see bigger as the better bargain.

No single solution exists, nor should any single culprit be blamed. We need to see obesity in all of its complexity if we're to sort out solutions that work for all of us. Food manufacturers and service industries need to be, and I believe are becoming, part of the solution. They're recognizing that their products contribute to the problem, so there are things that they can do to help.

We're seeing a lot of work going into two quick but effective responses: controlling portion sizes and reducing caloric density. Food companies are also doing more to educate consumers about the energy content of various foods and how to make more appropriate choices.

For example, we're launching a mini grant program to encourage schools to use the Center for Disease Control's School Health Index to identify and close gaps in nutrition or physical fitness programs. Another example is what the food industry is doing to encourage a better energy balance through more exercise.

As one example, we're partnering with the National Institute on Media and the Family, and with the Coalition for a Healthy and Active America on a Childhood Obesity Prevention Initiative in Cedar Rapids, called SWITCH. Through classroom education and community awareness, we

hope to switch down children's screen time and switch up their physical activity and switch to more fruits and vegetables.

But we're facing some real challenges in terms of consumer preferences. As this slide shows on the survey that you see here, consumers are more interested in foods that provide more convenience. That ranks well ahead of changing diets in pursuit of better nutrition, and before either of these comes preserving good taste for the things we voluntarily put in our mouth.

An important tool of addressing the complexity of obesity is technology. Biotechnology and new processing methods are helping food companies capture useful ingredients and putting them in new places. Nanotechnology may help us engineer flavors and bioactive ingredients that will be satisfying to consumers and also better for them. Cereals can be a great source of fiber and other healthful ingredients – ingredients like polyphenals, saphonines, lignins, the chopherals and other antioxidants, EFAs and vital sterols.

Soybeans are a great source of these ingredients in protein. If you were to lunch today, you had an opportunity to try some of them and understand how flavors and textures make them appealing to eat. These nutrition-enhancing ingredients can be extracted from grains and from soybeans. They can also be put in familiar products like breads, juices and the like. In order to promote heart health, digestibility, bone strength, joint comfort and the feeling of satiety or being full.

Technology, however, is not a cure-all. First, there are problems in finding the right regulatory environment for new technologies and new products. There are issues around rights of invention and property ownership, and there are added costs in building many of these attributes into food.

Food also touches other sensitive chords. New products can be safe without being accepted by customers. New processes can be proven to work without being trusted by consumers. And weight gain is a gradual process. Dealing with it or its effects can always be put off to another day – right?

The convergence of knowledge, casual linkages to wellness or disease, and food preferences may best come together in nutrigenomics. This field tries to understand at the molecular level the relationship between what we eat and what happens to our body. Properly applied, it can deliver better health, higher quality of life and a longer life at a lower cost than conventional lifestyles, plus conventional disease treatments. It's the ultimate in disease prevention and healthcare reduction.

And if we combine this knowledge with ways to make foods taste good, have attractive mouth feel, provide convenience, and offer variety, it could be a real winner. And that's a big reason why my company, Cargill, recently acquired the Guses – the Guse is a German company manufacturer of flavors and texturing systems. That's why we acquired the Guses food ingredients business, which has really great experience in some of these areas.

Between just letting obesity spread and nutrigenomic designed diets will lie a host of incremental strategies. Food manufacturers will develop novel ingredients and ingredient combinations to deliver more nutrition more tastefully. Even conventional agricultural products will be engineered and bred to offer health and appeal. And growing awareness will lead to better

choices for wellness, whether it's new foods, new self-discipline, new activity levels or some combination.

What I expect will emerge is a strategy built on three pillars – balance, choice, responsibility. We must achieve good balance in what we eat. Aristotle's counsel of *all things in moderation* still seems to make sense. We'll need choices to cover the differences between men and women, children and adults, and young and old. Choice also helps make healthfulness a complement to taste and not an alternative. And we'll need to take responsibility for our own behaviors. Technology and food service innovations can support good behavior, but success stills starts with giving consumers what they want.