Diet, not lack of exercise, is driving obesity

Warm-up question: Do you think people today move more or less than in the past? Why? How do our diets compare to what people used to eat?

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ARI SHAPIRO, HOST:

A major new study finds that people around the world burn **roughly** the same amount of calories each day, regardless of how active they are. As NPR's Maria Godoy reports, that strongly suggests that when it comes to obesity, it is what we eat, not a lack of exercise, that's the main driver.

MARIA GODOY, BYLINE: Back in the 1800s, obesity was almost nonexistent in the United States.

HERMAN PONTZER: If you look back, even just our grandparents' generation, the number of people who were overweight or had obesity and obesity-related health issues was much, much lower.

GODOY: That's Herman Pontzer, a professor of evolutionary biology and global health at Duke University. He says, over the last century, obesity has become common here and in most other industrialized nations. So what's changed?

PONTZER: So there's this ongoing, long-held belief in public health that as we've gotten more **sedentary**, as our populations have developed over the last few decades, that we've gotten less active. That's definitely true.

GODOY: Pontzer says that's led to the **assumption** that, as we sit at our desks all day typing on our computers, we're probably burning fewer calories than we used to, raising the risk of obesity. But is that really the case? To find out, Pontzer and an international team of **collaborators** looked at data gathered from more than 4,200 adults all over the world - some from countries with high obesity rates, others from populations where obesity is rare.

PONTZER: And we were able to do that in populations **across the spectrum**, from **hunter-gatherers** to rich countries, the developed countries like the U.S.

GODOY: Study participants were given a special water to drink that contained **isotopes** which came out in their urine. These isotopes allow scientists to determine exactly how much energy a person expends.

PONTZER: So we wanted to know how many calories people are burning over the course of a full day.

GODOY: Now, you would think that a person who was out **foraging** for berries all day, every day would burn a lot more calories than, say, your typical office worker. But as Pontzer and his colleagues report in the journal PNAS, that's not what they found.

PONTZER: Surprisingly, what we find is the total calories burned per day is really similar across these populations, even though the lifestyle and the activity levels are really different.

GODOY: Pontzer says this means if we aren't burning fewer calories than, say, the Hadza hunter-gatherers in Tanzania - a culture where obesity is rare - then it has to be differences in our diets that's driving weight gain.

DARIUSH MOZAFFARIAN: It's 100% the diet. And I think then the question is, what is it about the diet?

GODOY: That's Dr. Dariush Mozaffarian, director of the Food Is Medicine Institute at Tufts University. He was not involved in this study, but he says it adds to other recent research that suggests food is the biggest driver in obesity. He points out there's been a major shift in our food supply in recent decades. It's now dominated by **ultraprocessed food**.

MOZAFFARIAN: For decades, we've been telling Americans that you're lazy. It's your fault. You're not moving enough. You're eating too much. And I think what this study shows is that there's really complicated biology happening and that our food is driving this.

GODOY: Now, this doesn't mean there's no reason to exercise. After all, it's good for our mental and physical health in so many ways that have nothing to do with weight. But it does mean we can't outrun a bad diet. If we want to **tackle** the obesity epidemic, the changes have to begin on our plates. Maria Godoy, NPR News.

Vocabulary and Phrases:

1. **Roughly**: approximately; not exactly but close to a certain number or amount.
2. **Sedentary**: involving little physical activity, often sitting or staying in one place for long periods.
3. **Assumption**: something that is accepted as true without proof or evidence.
4. **Collaborators**: people who work together on a project or study.
5. **Across the spectrum**: including a wide and diverse range of people, activities, or situations.
6. **Hunter-gatherers**: people who live by hunting animals and gathering plants, rather than farming or buying food.
7. **Isotopes**: special forms of atoms that scientists can track to measure things like energy use in the body.
8. **Foraging**: searching for and collecting food, especially in nature.
9. **Ultraprocessed food**: food that has been heavily changed from its natural state using industrial methods and additives (like chips, sodas, instant noodles, etc.).
10. **Tackle**: to take on a difficult problem or challenge and try to solve it.

Comprehension Questions:

1. What common belief about exercise and obesity does the study challenge?
2. How did researchers measure how many calories people burn in a day?
3. What surprising finding did they discover about active and less active populations?
4. According to the researchers, what is the main cause of rising obesity rates?
5. Why is exercise still important, even if it's not the key to weight loss?

Discussion Questions:

1. Do you agree with the idea that diet is more important than exercise when it comes to obesity? Why or why not?
2. What kinds of ultraprocessed foods do you see most often in your daily life?
3. How can individuals and communities begin to eat healthier foods?
4. What role should governments or schools play in helping people tackle obesity?