

Iran's burgeoning biotech industry: 36 drugs, vaccines produced, with more on the way



High Council of Biotechnology within the ministry. He emphasized the importance of continued support for the biotech drug industry to ensure access and affordability of medicines for the Iranian people.

Seyyed Heider Mohammadi, head of the Food and Drug Organization, announced at the conference that the Central Bank has ordered operating banks to pay 30 thousand billion tomans (more than one million dollars) of working capital to pharmaceutical and medical equipment companies. Mohammadi acknowledged the importance of biotech drugs and the need to support the pharmaceutical industry to ensure easier access to medicines for the public.

During a recent trip to Russia, Iranian advances in biotechnology were met with surprise, prompting efforts to reduce insurance debts to pharmaceutical companies. Mohammadi stated that more than 90 percent of the problems faced by the Food and Drug Organization are external, and their duty is to facilitate and accelerate processes while working with other institutions.

● IRNA

Social Desk

A member of the Board of Directors of the Association of Manufacturers and Exporters of Medical Biotechnology Products of Iran announced that 36 types of

biotechnology drugs and vaccines have been produced in the country, with an additional 15 in the research and development stage. Fereidoun Mahboudi made the announcement on Wednesday at the third

conference of medical biotechnology products and related industries at the Olympic Hotel.

Mahboudi highlighted that the production of biotech drugs in Iran has resulted in four billion dollars of

foreign exchange savings and expects the global sale of biotech drugs to reach 900 billion dollars by 2030. Currently, 45 companies are active in the production of biotech drugs in Iran, with the past two decades con-

sidered the golden era for the country's biotech drug industry, according to IRNA. The Biotechnology Medical Committee has been present in the Ministry of Health since 1996, and Mahboudi anticipates the revival of the

Scientists explain health risks of living inside food swamps

You might have heard of food deserts, areas with few or no healthy food options or supermarkets within a short, walkable distance. Instead, these places are often filled with a glut of convenient takeaway stores, creating 'food swamps' that have dire health consequences for residents.

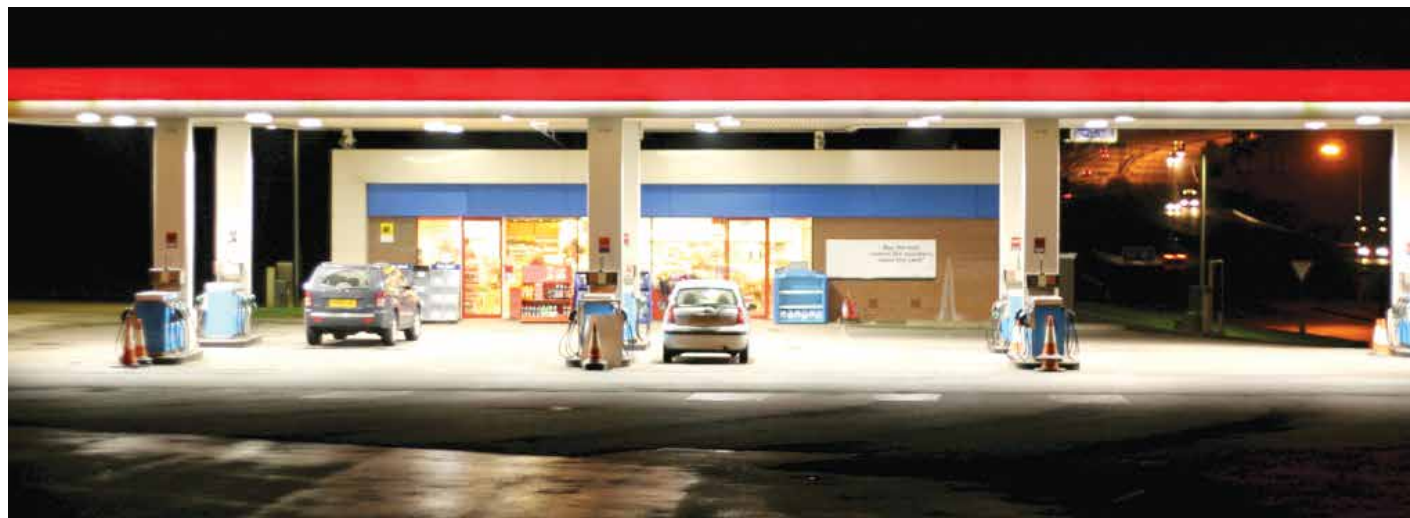
A new study from the US shows how food inequities writ large across the country translate to an increased risk of dying from obesity-related cancers, such as breast, bowel, and liver cancer, Science Alert reported.

Since the term 'food deserts' was coined in the early 1990s, some academics have questioned whether they exist. But in the decades since, numerous studies have revealed how social factors – largely determined by geography and public policies – influence health.

Wealthy, White neighborhoods in the US contain three to four more supermarkets than poor, Black suburbs do – limiting the latter's choice of affordable fresh food, especially if public transit is lacking. But when fruits and vegetables are made available in local stores, real-world studies show residents are quick to pick them up.

Meanwhile, in Australia, many suburbs of car-dependent Western Sydney have no food outlets at all, and when they do, 84 percent of them are fast-food options. Rates of chronic diseases such as obesity, diabetes, and cardiovascular disease are concerning high in these areas, researchers have found.

To get a clearer picture of how the availability of fresh food



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stores affects the health of US citizens, a team of public health researchers led by Malcolm Seth Bevel of Augusta University in Georgia mapped national health data from the past decade against data from the US Department of Agriculture Food Environment Atlas spanning roughly the same period.

The Atlas contains information on food services in local areas, while data from the US Centers for Disease Control and Prevention (CDC) documents cancer-related deaths, among other health measures.

Food swamps were defined as places where fast-food joints and convenience stores outnumber farmer's markets and grocery stores, with no supermarkets within a 1-mile (1.6 kilometers) radius.

"Food deserts and food swamps mainly exist in the south or southeastern region, where

chronic disease rates are the highest among US adults, including clusters for breast, lung, colorectal, and prostate cancers," write Bevel and colleagues in their published paper.

Some 13 different types of cancer are related to obesity, and together they account for 40 percent of all cancers in the US. Among the 3,038 counties studied – representing 96.7 percent of the US – those with high rates of obesity-related cancer deaths had a greater fraction of older people, Black residents, and low-income families, and higher rates of diabetes and obesity. Overall, age-matched residents in underserved communities had 77 percent greater odds of dying from obesity-related cancer than people residing in areas with ample healthy food options.

After adjusting for ethnic background and poverty rates of the area and age, this increased risk

remained high, with people in food swamps 30 percent more likely to die from obesity-related cancer.

According to researchers not involved in the work, the study findings challenge the long-standing view that diet is a modifiable risk factor that people can improve to reduce their risk of cancer, for example – if only they choose wisely.

Instead, the study demonstrates that where people live and work shapes their health in serious ways because they may not have a choice.

"There is growing acknowledgment that one's zip code and neighborhood may have just as much of an association with health outcomes as one's DNA," two public health researchers, Karriem Watson and Angela Odums-Young, write in an accompanying commentary. While the causes of obesity and

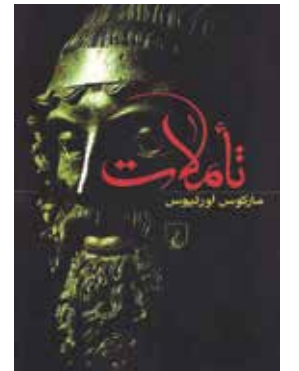
cancer are complex and influenced by more than just diet, Watson and Odums-Young have described the new study as a "clarion call" to examine the health implications of food inequities – and find solutions to this systemic problem.

"The complexities that prevent healthy food access are rooted in historical and structural factors, such as community disinvestment and systematic racism," the duo writes. Only by recognizing these barriers do public health interventions stand a chance of reducing health disparities, they add.

Bevel and colleagues suggest that making food access equitable is not just about providing more healthy food stores but about creating more walkable neighborhoods so people without cars can get to the shops. Community gardens are another great option shown to have many positive well-being benefits.

IRAN READS:

Meditations by Marcus Aurelius



As one of the most influential works of philosophy ever written, 'Meditations' by Marcus Aurelius has stood the test of time as a work of unparalleled insight and wisdom. Written nearly 2,000 years ago, this book is still widely read today by those seeking guidance in navigating the challenges of life, including Iranian book readers. Marcus Aurelius was Roman Emperor from 161 to 180 AD, a period marked by war, political upheaval, and personal loss. Throughout his reign, he turned to philosophy as a way of coping with these challenges and finding meaning in life. His reflections on life and the human condition were compiled into the twelve books that make up Meditations.

What sets Meditations apart from other philosophical works is its intimate nature. Rather than offering abstract theories or concepts, Aurelius writes directly to himself, using personal anecdotes and reflections to convey his ideas. In doing so, he creates a work that is not only deeply philosophical but also highly relatable.

The book is divided into twelve chapters, each containing a series of short entries on various topics. These entries touch on everything from the nature of existence to the importance of living a virtuous life. Throughout the book, Aurelius reflects on his own mortality and the impermanence of life, stressing the importance of living in accordance with nature and accepting the things we cannot control.

One of the key themes of the book is the idea of self-discipline. Aurelius believes that by mastering our desires and passions, we can achieve inner peace and live a more fulfilling life. He writes, "You have power over your mind - not outside events. Realize this, and you will find strength."

Another important theme is the idea of humility. Aurelius stresses the importance of recognizing our own limitations and shortcomings, rather than becoming overly confident or arrogant. He encourages readers to treat others with kindness and empathy, even in difficult situations, writing, "How much more grievous are the consequences of anger than the causes of it."

Perhaps the most striking aspect of Meditations is its relevance to contemporary life. Despite being written nearly two millennia ago, Aurelius' words are just as applicable today as they were then.