

OPINION

The Impacts Of Tobacco On Our Environment



M S Sodhar

Present data show that smoke from one cigarette produces ten times more air pollution than a diesel car's exhaust.

Apart from individual health, consuming tobacco has horrendous impacts on our environment. Cigarettes cause pollution in multiple ways. The most prominent impact is air pollution. Present data show that smoke from one cigarette produces ten times more air pollution than a diesel car's exhaust.

More astounding, these particulate materials emitted from smoking degrade the immediate environment and remain for hours in the air. In the manufacturing and processing of cigarettes, billions of trees are cut down every year.

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Heatwaves Effect & Preventive Adaptations In Wheat Crop



Zain Shahzad

Every 1°C increase above the average temperature of 23°C reduces wheat yields by about 10%. More than 40% of the total wheat acreage worldwide is affected by heat stress.

As climate change adversely affects agriculture. Wheat, which is the main crop of Pakistan, has also been greatly damaged by climate change.

Weather patterns and temperatures have been changed over a long period of time by climate change. The dominant cause of climate change since the 1800s has been human activity, even if some of these changes may be considered natural. Fossil fuels like coal, oil, and gases, which retain heat, are mostly to blame for this.

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Versatile Crop Soybean Owns Benefits For Human Health



Abid Zahoor

Are an excellent source of protein and contain all of the essential amino acids that the human body needs.

Soybean is a versatile and important crop that has numerous benefits for both human health and the environment. Originally cultivated in China more than 3,000 years ago, soybeans are now grown all over the world and are a vital source of protein and other essential nutrients.

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Micronutrients Deficiency And Interventions

Mubeen Bin Yamin

Micronutrients, also known as vitamins and minerals, are essential components of a high-quality diet and have a profound impact on health.

Consuming a diverse range of nutrient-dense foods alongside breastfeeding is the ideal way for young children to get essential micronutrients in their diets. But in many parts of the world, children's diets contain insufficient micronutrients, and deficiency in these nutrients is widespread.

Micronutrients, also known as vitamins and minerals, are essential components of a high-quality diet and have a profound impact on health. While they are only required in tiny quantities, micronutrients are the essential building blocks of a healthy brain, bones, and body.

Millions of children suffer from stunted growth, cognitive delays, weakened immunity, and disease as a result of a deficiency of micronutrients. For pregnant women, the lack of essential vitamins and minerals can be catastrophic, increasing the risk of low birth weight, birth defects, stillbirth, and even death.

Main deficiency of micronutrients:

Iodine: Deficiency is the primary cause of preventable brain



damage in children, Its most devastating impacts occur during foetal development and in the first few years of a child's life.

Globally, 30 percent of the world's population lives in areas with iodine deficiency. Iodine is required during pregnancy and infancy for the infant's healthy growth and cognitive development.

Globally, an estimated 1.8 billion people have insufficient iodine intake. Iodine content in most foods and beverages is low. Fortifying salt with iodine is a successful intervention—about 86% of households worldwide consume iodized salt. The amount of iodine added to salt can be adjusted

so that people maintain adequate iodine intake even if they consume less salt.

Vitamin A: Deficiency affects about one third of children living in low and middle income settings, mainly in sub-Saharan Africa and South Asia.

Vitamin A deficiency weakens the immune system and increases a child's risk of dying from infections like measles and diarrheal illnesses.

Vitamin A supports healthy eyesight and immune system functions.

Children with vitamin A deficiency face an increased risk of blindness and death from infections such as measles and diarrhoea.

Globally, vitamin A deficiency affects an estimated 190 million preschool-age children.

Providing vitamin A supplements to children ages 6 to 59 months is highly effective in reducing deaths from all causes where vitamin A deficiency is a public health concern.

Iron: Deficiency can lead to anemia, which increases the risk of hemorrhage and bacterial infection during childbirth and is implicated in maternal deaths.

In turn, babies may be born prematurely and suffer from infections, learning disabilities, and delayed development.

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Exploring The Nutritional Value And Health Benefits Of Soybeans

Ans Hussain

Soybeans have long been used in traditional Chinese medicine for their many health benefits, and they are known to help improve sleep quality.

Soybeans are a well-known superfood that is rich in essential vitamins, minerals, and essential fatty acids. Soybeans have long been used in traditional Chinese medicine for their many health benefits, and they are known to help improve sleep quality.

Recent studies have linked soybean consumption to improved sleep quality and a reduction in sleep disorders such as insomnia. The high levels of tryptophan in soybeans are believed to be the primary reason for this. Tryptophan is an essential amino acid that helps promote the production of serotonin, which is the neurotransmitter that regulates sleep.



Recent studies have shown that adding soybeans to your diet may help manage diabetes. Soybeans are rich in dietary fibre, which can help support healthy blood sugar levels and reduce cholesterol levels, leading to better control of diabetes.

Soybeans are also rich in important nutrients like protein, iron, and omega-3 fatty acids. Protein helps to slow the digestion of carbohydrates, which prevents blood sugar spikes after meals.

The iron and omega-3 fatty acids found in soybeans can help to improve insulin sensitivity, enabling the body to use its own insulin more efficiently.

Soybeans, a common legume, have been found to have multiple health benefits. Studies have shown that it can help maintain healthy blood circulation and flow. This is due to its high content of bioflavonoids and antioxidants, which help reduce inflammation and increase blood flow.

Additionally, its high protein content provides the body with essential amino acids that are necessary for healthy cell growth and repair. Additionally, soybeans help maintain healthy cholesterol levels and reduce the risk of heart disease. For all of these reasons, incorporating soybeans into your diet is a beneficial way to promote overall health and wellbeing.

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Nutritional Quality And Health Benefits Of Soybeans

Mariam Siddique

Soybean (Glycine max L.) is a species of legume native to East Asia that is widely grown for its edible purpose, which has several uses.

Soybean (Glycine max L.) is a species of legume native to East Asia that is widely grown for its edible purpose, which has several uses. Soybeans are an oil seed crop and have several useful nutrients, including protein, carbohydrates, vitamins, and minerals. Soybeans are very rich in nutritive components. Besides the very high protein content, soybeans contain a



lot of fiber and are rich in calcium and magnesium.

The soybean protein has a high biological value and contains all essential amino acids. Various soy products are available, including soy flour, soy milk, soy sauce, soy protein, tofu, and soybean oil.

Soybean, species of legume, is a source of both carbs and fat. They are a rich source of various vitamins, minerals, and beneficial plant compounds, such as isoflavones. For this reason, regular soybean, a specie of legume, intake may alleviate the symptoms of menopause and reduce the risk of prostate and breast cancer in females.

Soybeans and soy foods may reduce the risk of a range of health problems, including cardiovascular disease, stroke, coronary heart disease, and cancer, as well as improving bone health. Soybean is a high-quality protein; one or two daily servings of soy products can be beneficial to our health.

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As climate change adversely affects agriculture. Wheat, which is the main crop of Pakistan, has also been greatly damaged by climate change. Weather patterns and tem-

peratures have been changed over a long period of time by climate change.

The dominant cause of climate change since the 1800s has been human activity, even if some of these changes may be considered natural. Fossil fuels like coal, oil, and gases, which retain heat, are mostly to blame for this.

People, agriculture, and wild animals all face new threats because climate change is responsible for our existence. Dry spells,

thunderstorms, heat waves, ablation, warmer oceans, and

more frequent and severe droughts may all directly injure animals, devastate the habitats on which they depend for survival, and have a disastrous impact on people's way of life and communities.

85% of people on the planet are already feeling the consequences of climate change that is driven by humans. The model was developed under drought conditions, and the results showed that global warming is leading to severe droughts in 60% of the world's wheat growing areas.

Currently, drought affects 15% of grain productivity. Heat stress is the main environmental factor limiting grain yield.

Every 1°C increase above the average temperature of 23°C reduces wheat yields by about 10%.

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More astounding, these particulate materials emitted from smoking degrade the immediate environment and remain for hours in the air. In the manufac-

turing and processing of cigarettes, billions of trees are cut down every year.

Considering statistics by Imperial College London, the 32.4 million tonnes (Mt) of green tobacco harvested in 2014, used for the production of 6.48 Mt of dry tobacco in the six trillion cigarettes manufactured worldwide in 2014, contributed almost 84 Mt of CO2 emissions to climate change—approximately 0.2% of the global total.

Also, China alone harvests over three million tons (Mt) of leaves and trees for the tobacco industry. Another burden on the air is burning coal and other fossil fuels to produce cigarettes and tobacco for commercial use. The impacts of tobacco put tremendous pressure on the air



quality index and are one of the main reasons why developing countries are unable to improve their air quality. Can one imagine a desire for one cigarette that costs a lot for the environment? A sane mind must dis-

courage the temptation of smoking and the production of useless products not just for our own sake but for our planet Earth.

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Ans Hussain

Soybeans are a good source of both soluble and insoluble fiber. Soluble fiber dissolves in water and forms a gel-like substance in the gut, which can slow down digestion and help to regulate blood sugar levels. Insoluble fiber, on the other hand, does not dissolve in water and provides bulk to the stool, promoting regular bowel movements and helping to prevent constipation



Exploring The Nutritional Value And Health Benefits Of Soybeans

Continue From Page No 1

Soybeans have been known to have many health benefits, especially during pregnancy. They are a great source of protein, omega-3 fatty acids, B-vitamins, zinc, and iron. Eating soybeans during pregnancy can help to support a healthy foetal development and reduce the risk of many pregnancy-related problems.

Soybeans are also a good source of folate, which is known to reduce the risk of neural tube defects. In addition, soybeans contain isoflavones, which are plant-based compounds that can help reduce inflammation and improve heart health. Soybeans can be eaten in many forms, including roasted, boiled,

as an ingredient in soups, salads, and other dishes. Eating soybeans during pregnancy can help ensure a healthy and happy pregnancy.

Soybeans have a high level of mineral and vitamin content. The impressive levels of copper, selenium, zinc, magnesium, and calcium in soybeans help keep the bones stronger and healthier.

Eating soybeans is a great way to promote strong bones and healthy joints. Soybeans contain isoflavones, which are compounds that can help reduce inflammation as well as support bone mineralization and collagen production.

In addition, soybeans are a great source of protein, magnesium, and calcium, which are essential for keeping bones and joints healthy. Eating soybeans in place of processed and unhealthy foods can also help with weight management, which can help reduce the risk of developing bones and joint problems.

Soybeans are a good source of both soluble and insoluble fiber. Soluble fiber dissolves in water and forms a gel-like substance in the gut, which can slow down digestion and help to regulate blood sugar levels. Insoluble fiber, on the other hand, does not dissolve in water and provides bulk to the stool, promoting regular bowel movements and helping to prevent constipation.

Soybeans also contain prebiotics, which are non-digestible carbohydrates that serve as food for the beneficial bacteria in the gut. This can help promote the growth of these beneficial bacteria and maintain a healthy gut microbiome. A healthy gut microbiome is important for overall digestive health, as it helps break down food, absorb nutrients, and protect against harmful pathogens.

Soybeans and soy-based products have been the subject of research for their potential anti-cancer properties. Several studies have found that compounds in soybeans, such as isoflavones and genistein, have

anti-inflammatory and antioxidant effects that may help to prevent the development and progression of certain types of cancer.

Protease inhibitors, which are found in soybeans, have been shown to inhibit the growth of cancer cells and prevent the formation of tumours in the human body. They may help reduce the risk of colon cancer

between soy consumption and breast cancer. Some studies have found that regular soy consumption may reduce the risk of breast cancer, potentially due to the presence of compounds in soy that have anti-estrogenic effects.

Prostate cancer is another type of cancer that has been studied in relation to soy consumption. Some studies have

Soybeans have been shown to have potential benefits for weight management. This is due in part to their nutrient composition and their effects on hunger and fullness hormones. Soybeans are a good source of protein,

which is a satiating macronutrient that can help to control hunger and reduce overall calorie intake. Additionally,

It is important to note that while soybeans can have potential health benefits for weight management, they should not be considered a magic solution for weight loss. A healthy diet and regular physical activity are still key components of a successful weight management plan.

Soybeans and soy-based foods have been studied for their potential effects on weight management and obesity. Some studies have suggested that consuming soy foods may help to regulate appetite and reduce calorie intake, leading to weight loss.

Additionally, soybeans are a good source of protein, which can help to increase satiety and reduce overall calorie intake.

Consuming soybeans may have antioxidant effects that help promote overall health and reduce the risk of chronic diseases.

Studies have found that people who regularly eat soybeans have lower levels of oxidative stress, which is known to contribute to various diseases and health problems.

The isoflavones present in soybeans may also provide protection against cardiovascular disease and certain cancers. Additionally, these isoflavones may help reduce bad cholesterol levels, lower blood pressure, and improve blood sugar levels.



by blocking the absorption of cholesterol and promoting the excretion of bile acids.

One area of research has focused on the relationship

found that soy intake may reduce the risk of prostate cancer, though more research is needed to fully understand the potential benefits.

soybeans are low in calories and high in fiber, which can also help to promote feelings of fullness and prevent overeating.



Mariam Siddique

Soybean oil seals moisture into your hair and leaves it shiny and glossy. The vitamin E properties of soybean oil make it essential for maintaining a healthy scalp. Soybeans contain antioxidants and phytonutrients that are linked to various health benefits. These antioxidant properties help reduce inflammation, remove dandruff, and soothe an itchy scalp



Nutritional Quality And Health Benefits Of Soybeans

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Soybean oil is a rich source of linoleic acid, a polyunsaturated fatty acid, and offers antioxidant nutrients that are helpful in maintaining healthy skin. Soybean has positive research support for its antioxidant properties as well as its potential to reduce photoaging of the skin from chronic sun exposure.

Soybean oil seals moisture into your hair and leaves it shiny and glossy. The vitamin E properties of soybean oil make it essential for maintaining a healthy scalp. Soybeans contain antioxidants and phytonutrients that are linked to various health benefits. These antioxidant properties help reduce inflammation, remove dandruff, and soothe an itchy scalp.

Soybean oil is a common type of cooking oil that has been associated with several health benefits. In particular, it may help promote skin health, reduce cholesterol levels, prevent bone loss, and provide important

omega-3 fatty acids.

Soybean, a species of legume, is a nutrient-dense source of protein that can safely be consumed several times a week and probably more often and is likely to provide health benefits, especially when eaten as an alternative to red and processed meat.

On the other hand, soybean oil is another product of the processing of the soybean crop and is used in many industrial products. Dry soybean contains 37% protein, 20% oil, 35% carbohydrates, 5% sugar, 11% NDF, 12% soluble fiber, 9% humidity, 5% minerals, and 1% vitamins.

Soybean oil contains about 15.65% saturated fatty acids, 22.78% mono-saturated fatty acids, and 57.74% poly-unsaturated fatty acids. Soybeans are rich in unsaturated fatty acids and low in saturated fatty acids.

The use of soy milk as a substitute for people with lactose intolerance and the use of soybeans in weight management and cosmetics are described. The efforts are made through conven-

tional breeding, mutation, and biological approaches to

develop specialty soybeans with improved nutritive

value to address the needs of the soy food and feed indus-

tries.

There were two experiments conducted to determine the energy values of soybean oil, beef tallow, and their blends and to evaluate the effect of including 6.0% of these blends on performance parameters and carcass characteristics of broilers.

In a digestibility experiment, the mean values of nitrogen-corrected apparent metabolizable energy were 8402, 8542, 8659, 9109, and 9505 kcal/kg for 0:100, 25:75, 50:50, 75:25, and 100:0 ratios, respectively. The data obtained indicate that these values increased as the level of soybean oil increased, and the highest obtained value was when soybean oil was used in a 100:0 ratio.

During the performance experiment, fat sources didn't influence the performance or carcass characteristics. It is concluded that there is a nutritional equivalence between fat sources and that the utilisation of beef tallow can be improved by the addition of soybean oil.



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Tobacco and land degradation. In addition to it, cigarette waste contributes a lot to land pollution due to its non-biodegradable nature.

Cigarette butts never disappear and lead to land degradation by being carried as runoff and drains to rivers, beaches, and oceans. They have long been the single most collected item on the world's beaches, with a total of more than 60 million collected over 32 years.

To curb land and soil pollution, environmentalists and world leaders can ban the use of plastic, just as they have turned a blind eye to cigarettes.

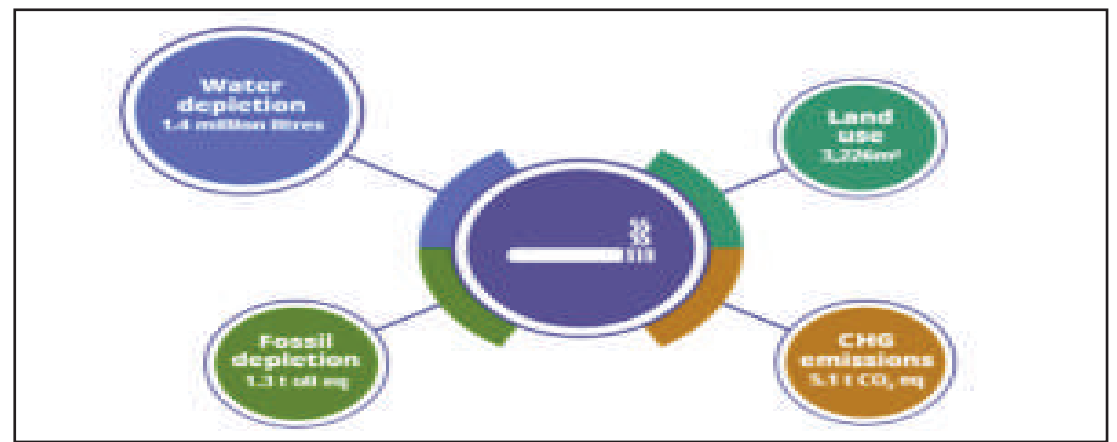
Consuming tobacco and water scarcity. Along with this, tobacco is also a big source of water scarcity. One report calculates the environmental impact of a single smoker over their lifetime: a person smoking a pack of 20 cigarettes per day for 50 years is responsible for 1.4 million litres of water depletion. In industries, tobacco production uses more than 22 billion tonnes of water.

In the wake of these figures,

tobacco and the consumption of cigarettes have devastating impacts on the environment, particularly for developing nations such as Pakistan. Before it gets too late, developed and developing nations must limit the use of tobacco for the sake of our environment and ecosystem, as every step would be beneficial. The world should learn from the act of New Zealand, whose parliament recently passed a bill that will completely make tobacco illegal for those who are born after 2009. This gesture of restricting smoking will bear fruit for coming generations and our environment.

The world has to make a choice: either to benefit the tobacco industries by not banning tobacco or to restrict tobacco by safeguarding lives and our planet.

The options lie between short-term gain with prolonged devastation and long-term sustainability with short-term pain. Pakistan also needs to increase the levy on tobacco and limit the use of cigarettes, as the country is already the eighth most vulnerable in the environment.



“As technology accumulates and people in more parts of the planet become interdependent, the hatred between them tends to decrease, for the simple reason that you can't kill someone and trade with him too.”
—Steven Pinker



Zain Shahzad

The high temperature causes an increase in transpiration that causes drought, resulting in low productivity. The heat stress disrupts the integrity of chloroplasts, leaf senescence, and ultimately the photosynthesis of grain. The ageing of leaves during grain filling reduces the chlorophyll content of leaves



Heatwaves Effect & Preventive Adaptations In Wheat Crop

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For humans, wheat is a crucial cereal crop. With billions of people depending on it for food, it is one of the most commonly grown and consumed crops in the world. In many nations, including Pakistan, a crop of wheat is a staple meal that is used to manufacture a wide range of goods, including bread, pasta, noodles, crumpets, and muffins. Moreover, it is utilized in the creation of biofuels and as animal feed.

Wheat is an excellent source of nutrients such as vitamins, minerals, dietary fiber, and carbs. It is especially high in iron, which is necessary for the production of red blood cells, and B vitamins, which are crucial for energy metabolisms.

Consuming foods made from whole grain wheat has been associated with a decreased chance of contracting long-term illnesses like heart disease, type 2 diabetes, and certain cancers. Overall, wheat is a crucial crop for the world's economy as well as human nourishment.

Temperature increases have a variety of effects on wheat crop production in Pakistan. Wheat grain quality declines as a result of climate change because it disrupts the distribution of vital nutrients and photoassimilates.

The high temperature causes an increase in transpiration that causes drought, resulting in low productivity. The heat stress disrupts the integrity of chloroplasts, leaf senescence, and ultimately the photosynthesis of grain. The ageing of leaves during grain filling reduces the chlorophyll content of leaves.

Wheat development and growth are greatly hampered by high temperatures. High temperature stress reduces photosynthetic activity. Heat stress decreases the molar proportion of more unsaturated lipids during the grain filling stage, while high temperature stress increases the percentage of less unsaturated lipids throughout the blooming and grain filling stages.

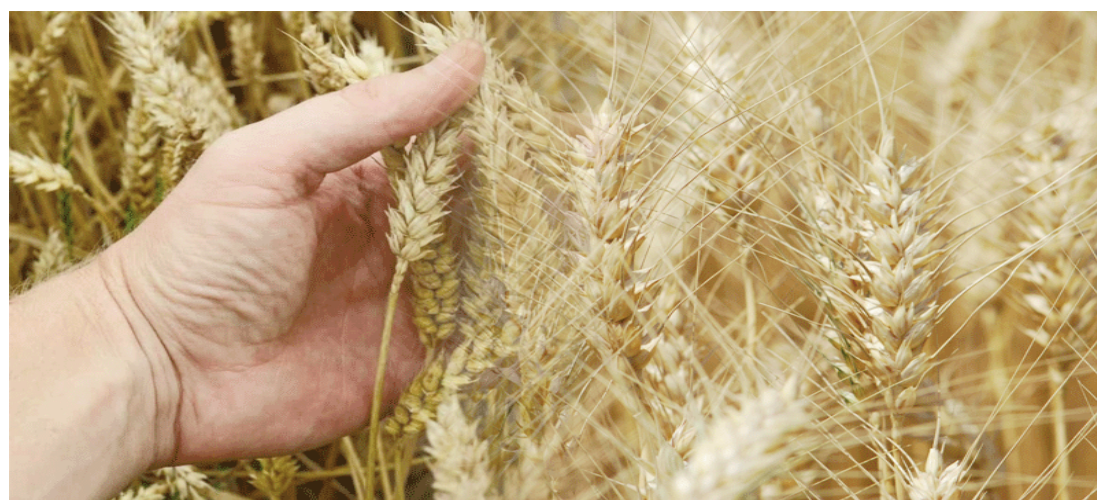
As we discussed above, high temperatures have a significant impact on crop growth and development, leading to decreased yield and quality. Agronomic practices can help mitigate the effects of high temperatures in several ways. Here are some examples:

Crop selection: Choose heat tolerant varieties that are adapted to high temperatures can help reduce the impact of heat stress on wheat. These varieties have traits that include a deeper root system, better use efficiency, and the ability to maintain photosynthesis under high temperature

conditions.

Planting date: Planting wheat earlier in the season will avoid the severe hot period of the season and reduce the impact of high temperatures because the crop can attain the required growing degree days for optimum or maximum yield.

Soil management: Proper soil management practices such as soil tillage, soil organ-



ic matter management, and soil nutrients management can help to improve soil water retention capacity and soil structure, which can reduce the effect of high temperatures on crop yield and growth.

Irrigation management: Proper irrigation management can help minimize the effect of

heat stress by providing crops with adequate water to cool themselves through transpiration. Ensuring that plants receive enough water during the heading and grain filling stages is critical to minimizing the effect of high temperature stress.

Mulching: Mulch can help maintain soil temperatures and preserve soil moisture. Mulch can be made from a



variety of materials, including straws, leaves, or other organic matter. It can help reduce water loss from the soil, which can help maintain soil moisture levels and reduce the effects of high temperature stress on the plant.

Fertilization: Proper fertilization can improve crop

growth and development, minimizing the effects of extreme heat on crop growth, yield, and quality.

Plant density: Adjusting plant density (the optimum plant population) can help to reduce the competition for resources among plants and improve the efficiency of water and nutrient uptake, which ultimately helps the crop better cope with high



temperatures.

Harvest management: Harvesting during cooler parts of the day can reduce the impact of high temperature stress on crops by reducing the risk of moisture loss and wilting.

Provide shade: Provide temporary shade for the wheat

plants during the hottest part of the day. This can be done with shade cloth or by planting crops that provide shade. Providing shade can help reduce the amount of direct sunlight that reaches the wheat plants, which can lower the temperature of the plant and reduce water loss through transpiration.

Apply foliar sprays: Foliar sprays containing plant growth regulators or nutrients can help mitigate the negative effects of high temperature stress on wheat plants. These sprays can help to improve photosynthesis, reduce water loss through transpiration, and improve the plant's ability to withstand heat stress. Manage pests and diseases that can decrease the plant's tolerance to high temperature stress is important. Pests and diseases can weaken the plant and reduce its ability to overcome stress, so it is important to maintain good pest and disease management practices.

Overall, a combination of these agronomic practices can help to mitigate the impact of high temperatures on wheat crop and increase their resilience to changing climate conditions in Pakistan as well. We must be adopting some of these strategies to secure our staple food crop and our basic needs, which are fulfilled by the wheat crop.



Abid Zahoor

Soybeans are also important from an environmental perspective. They are a nitrogen-fixing crop, which means that they are able to take nitrogen from the air and convert it into a form that can be used by other plants. This reduces the need for synthetic fertilisers, which can be expensive and have negative environmental impacts



Versatile Crop Soybean Owns Benefits For Human Health

Soybeans are an excellent source of protein and contain all of the essential amino acids that the human body needs.

Soybean is a versatile and important crop that has numerous benefits for both human health and the environment. Originally cultivated in China more than 3,000 years ago, soybeans are now grown all over the world and are a vital source of protein and other essential nutrients. In this article, we will explore the many benefits of soybeans and why they are so important.

• Nutritional Benefits:

Soybeans are an excellent source of protein and contain all of the essential amino acids that the human body needs.

This makes soybeans a valuable protein source for vegetarians and vegans who may not consume animal products. Soybeans also contain a range of other essential nutrients, including iron, calcium, magnesium, potassium, and vitamins B and E.

Soybeans have been shown to have a number of health benefits as well. Studies have suggested that consuming soy products may help to reduce the risk of heart disease, lower cholesterol levels, and improve bone density. Soybeans may also have anti-inflammatory properties, which may help reduce the risk of certain types of cancer.

• Environmental Benefits:

Soybeans are also important from an environmental perspective. They are a nitrogen-fixing crop, which means that they are able to take nitrogen from the air and convert it into a form that can be used by other plants. This reduces the need for synthetic fertilisers, which can be expensive and have negative environmental impacts.

Soybeans can also be used as a sustainable alternative to animal feed. Livestock production is a major contributor to greenhouse gas emissions, deforestation, and other environmental problems. By using soybeans as a source of protein for livestock, we can reduce the environmental impact of animal agriculture.

Soybeans can also be used to produce biofuels, which are

renewable and have a lower carbon footprint than traditional fossil fuels. This is because soybeans can be grown using sustainable agricultural practices, and converted into biodiesel without producing harmful emissions.

• Economic Benefits:

Soybeans are an important crop for many countries around the world. They are a major export for countries like Brazil and the United States and are an important source of income for farmers and other agricultural workers. Soybeans are also used in a wide range of industries, from food and beverage production to pharmaceuticals and cosmetics.

Soybeans are one of the most widely cultivated and consumed crops in the world, and for good

reason. These legumes are not only an excellent source of plant-based protein, but they also contain a variety of essential nutrients that are important for overall health and wellbeing. In this article, we'll explore the many benefits of soybeans and why they should be a part of a healthy diet.

HEALTH BENEFITS:-

a) High in Protein: Soybeans are one of the best plant-based sources of protein, containing all the essential amino acids that the body needs. A 100-gram serving of soybeans can provide around 36 grams of protein, making it an excellent choice for vegetarians and vegans who may struggle to get enough protein in their diet.

b) Heart Health: Soybeans are rich in antioxidants and healthy

fats, including omega-3 and omega-6 fatty acids. These nutrients have been shown to lower cholesterol levels, reduce inflammation, and improve heart health. In fact, several studies have found that consuming soy protein can reduce the risk of heart disease by lowering blood pressure, improving blood lipid levels, and reducing arterial stiffness.

c) Menopausal Symptoms: Soybeans contain natural compounds called isoflavones, which have been found to help alleviate menopausal symptoms such as hot flashes and night sweats. These compounds mimic the effects of estrogen in the body, helping to reduce the severity of menopausal symptoms without the risks associated with hormone replacement therapy.

d) Digestive Health: Soybeans, a versatile crop, are a good source of dietary fiber, which is important for maintaining digestive health. Fiber can help regulate bowel movements, prevent constipation, and reduce the risk of colon cancer. Additionally, soybeans contain oligosaccharides, which are a type of prebiotic that can help to support the growth of beneficial bacteria in the gut.

e) Bone Health: Soybeans are a rich source of calcium, which is essential for building and maintaining strong bones. In fact, soybeans contain more calcium than any other legume.

Additionally, soybeans contain other bone-healthy nutrients such as magnesium, zinc, and vitamin K.

f) Cancer Prevention: The isoflavones in soybeans may also have anti-cancer properties. Several studies have found that consuming soy products can help reduce the risk of certain cancers, including breast and prostate cancer.

• Versatility:-

Soybeans are an incredibly versatile crop and can be used in a variety of different dishes. They can be cooked and eaten as a side dish, added to soups and stews, or used as a meat substitute in vegetarian and vegan recipes. Soy milk, tofu, and tempeh are just a few of the many soy products available that can be used to create a wide range of delicious and nutritious meals.

• Conclusion:-

Soybeans are a versatile and important crop that provide a range of benefits for human health, the environment, and the economy. They are a valuable source of protein and other essential nutrients and have been shown to have a number of health benefits.

Soybeans are also a sustainable alternative to animal feed and can be used to produce renewable biofuels. As such, it is clear that soybeans will continue to play an important role in our agricultural systems and in the global economy for years to come.



Mubeen Bin Yamin

Providing vitamin A supplements to children ages 6 to 59 months is highly effective in reducing deaths from all causes where vitamin A deficiency is a public health concern



Micronutrients Deficiency And Interventions

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Almost 40 percent of pregnant women and more than 40 percent of children under 5 in developing countries are anaemic. About half of these cases are estimated to result from iron deficiency. Iron is critical for motor and cognitive development. Children and pregnant women are especially vulnerable to the consequences of iron deficiency. Iron is a leading cause of anemia, which is defined as a low haemoglobin concentration.

Anemia affects 43% of children younger than 5 years of age and 38% of pregnant women globally.

Anemia during pregnancy increases the risk of death for the mother and low birth weight for the infant.

World Health Organization (WHO) recommends iron and folic acid supplements for reducing anaemia and improving iron status among women of reproductive age. Fortifying flour with iron and folic acid is globally recognised as an effective, low-cost intervention.

Zinc: Deficiency impairs immune function and is associated with an increased risk of gastrointestinal infection. It is also a contributing factor in child deaths due to diarrhoea. Zinc deficiency is especially com-

mon in lower income countries due to the low dietary intake of zinc-rich foods and inadequate absorption.

Zinc promotes immune functions and helps people resist infectious diseases, including diarrhoea, pneumonia, and malaria. Zinc is also needed for healthy pregnancies.

Globally, 17.3% of the population is at risk for zinc deficiency due to dietary inadequacy.

Zinc supplements reduces the incidence of premature birth, decreases childhood diarrhoea and respiratory infections, lowers the number of deaths from all causes, and increases growth and weight gain among infants and young children.

Calcium, vitamin D, and folate deficiencies are a particular concern during pregnancy and can lead to a number of health complications for both the mother and growing baby.

Vitamin D builds healthy bones, vitamin D deficiency causes bone diseases, including rickets in children and osteomalacia in adults. Vitamin D is required for muscle and nerve functions. Vitamin D helps the immune system resist bacteria and viruses.

Folate (vitamin B9) is essential in the earliest days of fetal growth for the healthy development of the brain and spine. Ensuring sufficient levels of



folate in women prior to conception can reduce neural tube defects (such as spina bifida and anencephaly).

Providing folic acid supplements to women ages 15-49 and fortifying foods such as wheat flour with folic acid reduces the incidence of neural tube defects and neonatal deaths.

How deficiency of micronutrients prevented and treated?

UNICEF supports the following strategies to prevent and treat micronutrient deficiency

in women and children: Dietary diversification strategies help families access a range of nutrient-rich foods.

They involve educating caregivers on appropriate infant and young child feeding practices and improving the use of locally available foods. Supplementation programs provide specific micronutrients that are not available as part of the regular diet.

Supplementation is especially important at times when the body has particularly high

micronutrient needs—for example, during pregnancy—that are difficult to meet with diet alone.

One example is iron and folic acid supplements for pregnant women, which can reduce the risk of low birth weight, maternal anemia, and iron deficiency.

Home fortification programs provide carers with micronutrient powders to sprinkle on the foods they prepare for children at home. This can significantly improve the dietary quality of

complementary foods for children from 6 months to the age of 2 or older.

Home fortification empowers carers and provides them with the tools to improve the family diet without requiring a major change to their dietary practice.

These strategies, together with the prevention and treatment of infectious diseases, can minimise micronutrient depletion and reduce micronutrient deficiencies among vulnerable groups.