



What's a plantbased diet?

Mostly or entirely of foods derived from plants and with few or no animal products.

90% of your calories come from plants.

Diets:

Whole-food Plant-based Diet, The Ornish Diet, Macrobiotic Diet, The Bluezones Diet, Mediterranean Diet, Okinawan Diet, Flexitarian Diet



NEWS POLITICS VOICES FINALSAY SPORT CULTURE VIDEO INDY/LIFE HAPPY LIST INDYBEST LONG READS INDY100 VOUCHERS PREMIUM

LIFE > EATS

#40plantsaweek

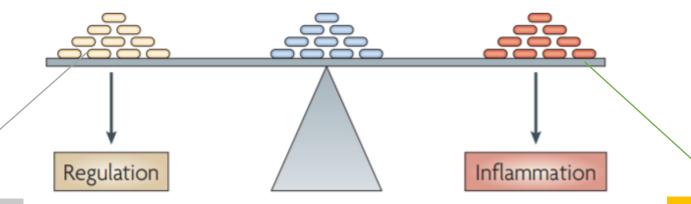
From 30 vegetables a week to faecal transplants: Keeping your gut microbiome happy is the key to healthy eating

'There isn't one size fits all and some of these ideas that we've been led into by industry or government are patently nonsense,' Tim Spector, author of 'The Diet Myth', tells **Julia Platt Leonard**



Balanced Immune System





Good Microbes

Imbalanced immune system

Such as:

Firmicutes
Bifidobacterium
Lactobacillus
Saccharomyces
Butyricicoccus

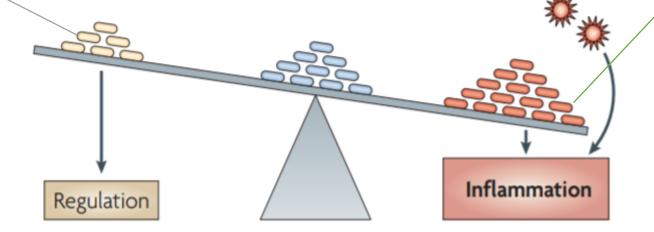


Figure 1 | Immunological dysregulation associated with dysbiosis of the microbiota. a | A healthy microbiota

Bad Microbes

Such as:

Bacteroides fragilis

E. Coli

Salmonella

Clostridium

Difficile

Staphylococcus

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Zhejiang Da Xue Xue Bao Yi Xue Ban. 2020 Feb 21;49(1):0.

[Management of corona virus disease-19 (COVID-19): the Zhejiang experience].

'Many patients with COVID-19 showed gut dysbiosis ith decreased probiotics, *Lactobacillus* and *Bifidobacterium*.

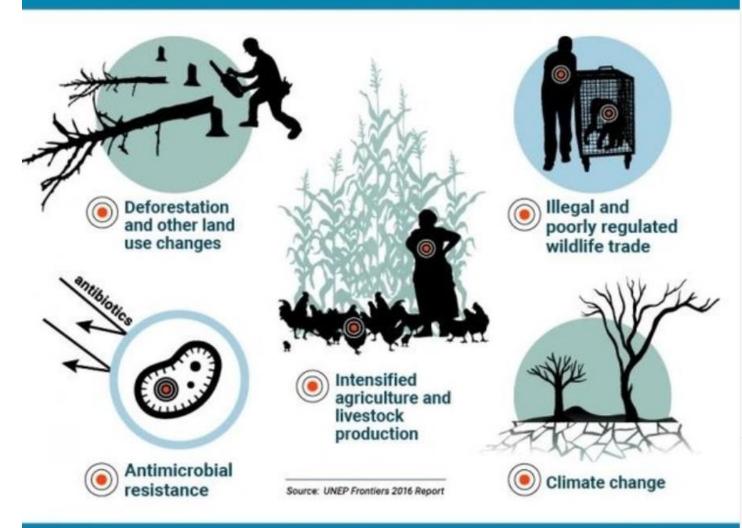
Nutritional and gastrointestinal function should be essed assessed for all patients. Nutritional support and n of application of prebiotics or probiotics were suggested to regulate the balance of gut microbiota and reduce the risk of secondary infection due to bacterial translocation.

50% of patients had positive RT-PCR results in their feces. We also isolated alive viral strains from feces, indicating potential infectiousness of feces. Dynamic cytokine detection was necessary to timely identifying cytokine storms and application of artificial liver blood purification system. The "Four-Anti and Two-Balance" strategy effectively increased cure rate and reduced mortality. Early antiviral treatment could alleviate disease severity and prevent illness progression, and we found lopinavir/ritonavir combined with abidol showed antiviral effects in COVID-19. Shock and hypoxemia were usually caused by cytokine storms. The artificial liver blood purification system could rapidly remove inflammatory mediators and block cytokine storm. Moreover, it also favored the balance of fluid, electrolyte and acid-

Lessons from Covid-19 Pandemic

- 63% of agricultural lands are used for livestock
- Meat-centric diet is one of the top 3 primary causes of climate change (18% greenhouse gas emissions)
- 70% world's fresh water go to livestock
- 70% of antibiotics production in the world is used for livestock

What factors are increasing zoonosis emergence? (Diseases transmitted from animals to humans)



#COVID19

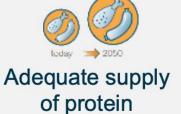


Only 40% of the protein from the field land on our plate.





How to transition to a planetary health diet?



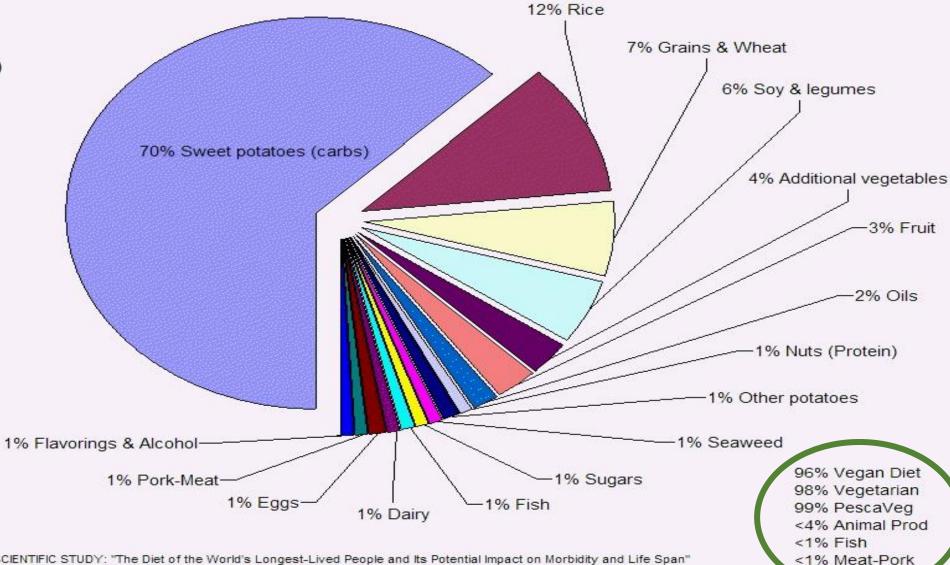
OKINAWA LONGEVITY DIET



- 12% Rice
- □ 7% Grains & Wheat
- □ 6% Soy & legumes
- 4% Additional vegetables
- ■3% Fruit
- ■2% Oils
- 1% Nuts (Protein)
- 1% Other potatoes
- ■1% Seaweed
- □ 1% Sugars
- ■1% Fish
- 1% Dairy
- 1% Eggs
- 1% Pork-Meat
- 1% Flavorings & Alcohol

85% carbs 09% Protein 06% Fat 85-10-5

1785 Calories



SCIENTIFIC STUDY: "The Diet of the World's Longest-Lived People and Its Potential Impact on Morbidity and Life Span"

JOURNAL: Annals of the Academy of Sciences - Volume 1114: 434–455 (2007).

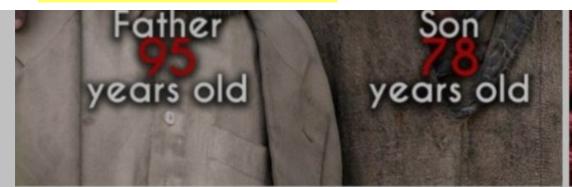
Note: These are the Actual Food Measurements of the Centenarians, not the diet of All island Okinawans or the ones who died, but the ones who lived.

Hunza: The Longest Living Population

Secret #1: You Are What You Eat

The first and most critical secret of Hunza longevity and youthfulness is diet.

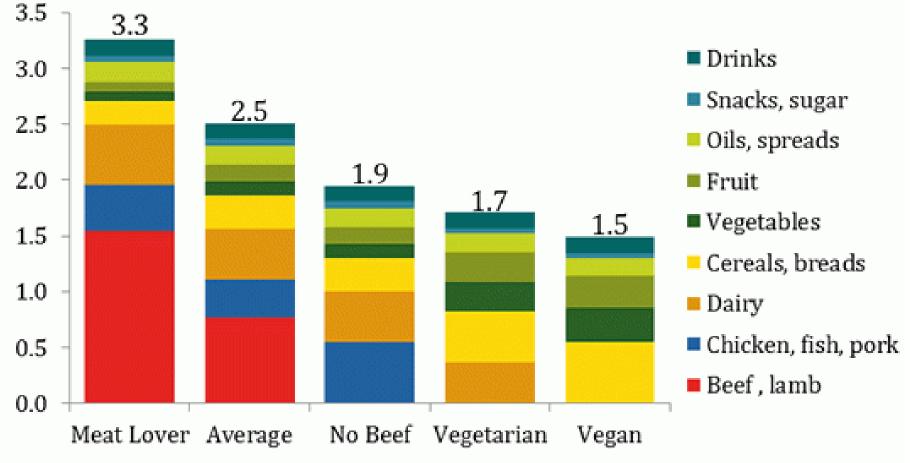
- 1. Starchy vegetables: otato, carrot, radish, pumpkin
- **2. Leafy greens:** pinach, lettuce
- **3. Fruits:** pricot, peach, blackberry, cherry, pear, apple
- 4. **Beans:** green peas, long beans
- 5. Nuts: valnut, hazelnut, chestnut, and almond
- **6. Grains:** arley, millet, buckwheat, whole wheat, mostly in a form of chapatti
- 7. 'Very little animal protein: memade milk & cheese, naturally-raised meat





Foodprints by Diet Type: t CO2e/person





Note: All estimates based on average food production emissions for the US. Footprints include emissions from supply chain losses, consumer waste and consumption. Each of the four example diets is based on 2,600 kcal of food consumed per day, which in the US equates to around 3,900 kcal of supplied food.

Sources: ERS/USDA, various LCA and EIO-LCA data





How can we feed a future population of 10 billion people a healthy diet within planetary boundaries?

Plant-centered Diet



