

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search http://ageconsearch.umn.edu aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C. +

Food Marketing Understanding and influencing consumer demand





Dr David Pearson

Director Food Matters Research Program and Professor in Advertising University of Canberra, Australia E: david.pearson@canberra.edu.au

53rd National Conference of Australian Agricultural and Resource Economics Society (AARES) 4 – 7 February 2014, Port Macquarie

A TRIUMPH OF HUMAN ENDEAVOR

A system that feeds 7 billion: Constant demand being met by seasonal production



Food System > Marketing Consumer Science > Healthy Diets Sustainable Diets > Discussion



Food Security: a Grand Challenge for the 21st Century

'when all people, at all times, have physical, social and economic **access** *to sufficient, safe and nutritious food to meet their dietary* **needs** and **food preferences** for *an active and healthy life'* (FAO 2008)

and an aspirational goal....







Globally, food is 'plentiful' and 'cheap'.

However, **inequalities** in access to food and environmentally **unsustainable** system

(a victim of its own success....)





Global Food System Under Pressure: how to create 'more' from 'less'??

Increasing Demand

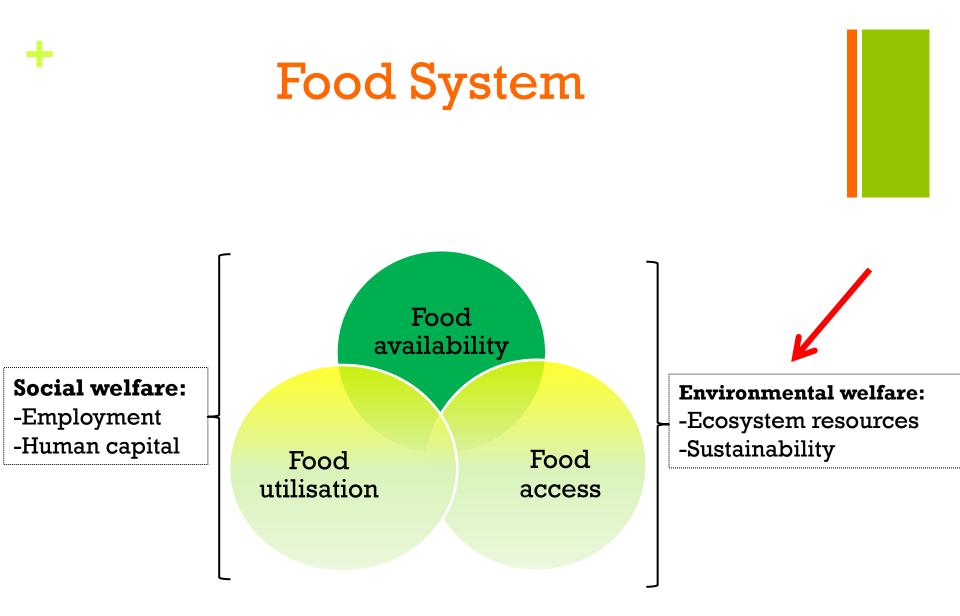
- Increased expectations of affluent consumers
- Global population growth



Decreasing Resources

- Decreasing availability of fresh water and arable land
- Decreasing fossil fuel and fertilizer availability
- Uncertainty associated with global climate change





(Ingram 2011:421)

Food Supply Chain



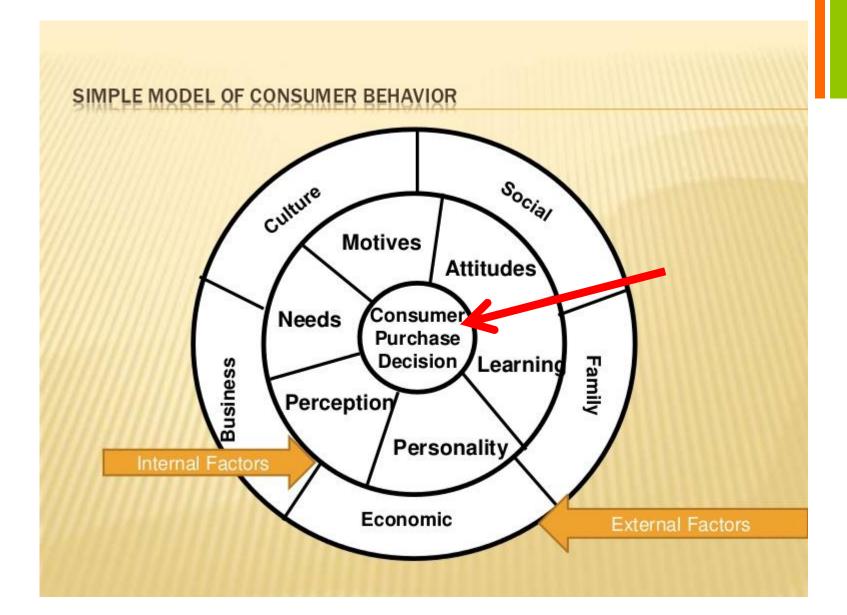
Marketing

+



Consumer Science

┿





'Fit' A diet that meets main nutritional requirements for healthy humans. Prevalent diet in developed countries.

'Fat' A diet in which a surplus of energy is consumed, leading to adverse conditions such as obesity.

'Famine' A diet in which not enough food in consumed, resulting in undernourishment.

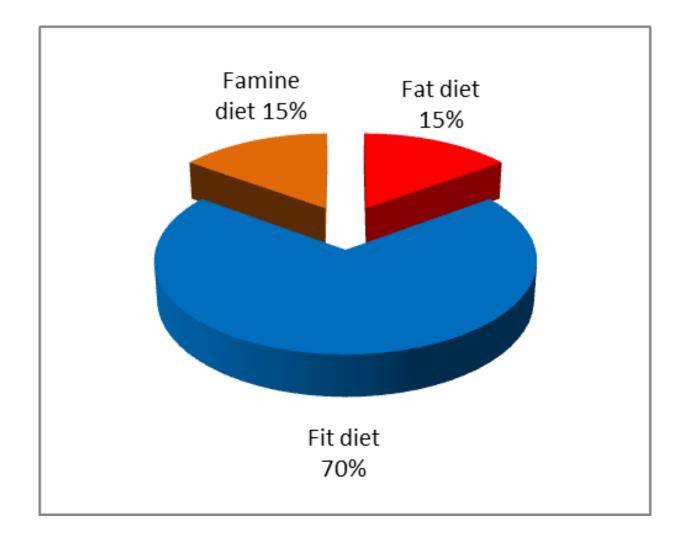






Global diets 2010

+



Sustainable diet definition

The UN Food and Agriculture Organisation has defined a sustainable diet as being:

'protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable;

nutritionally adequate, safe and healthy;

while optimising **natural** and **human resources**'

(FAO 2010)

(an aspirational goal...)



Pathways for changes in food system

Resilience

- The ability of a system to reorganise and adapt when disturbed in such a why that retains its function and structure
 - > thus avoiding 'failure' and preserving 'status quo'

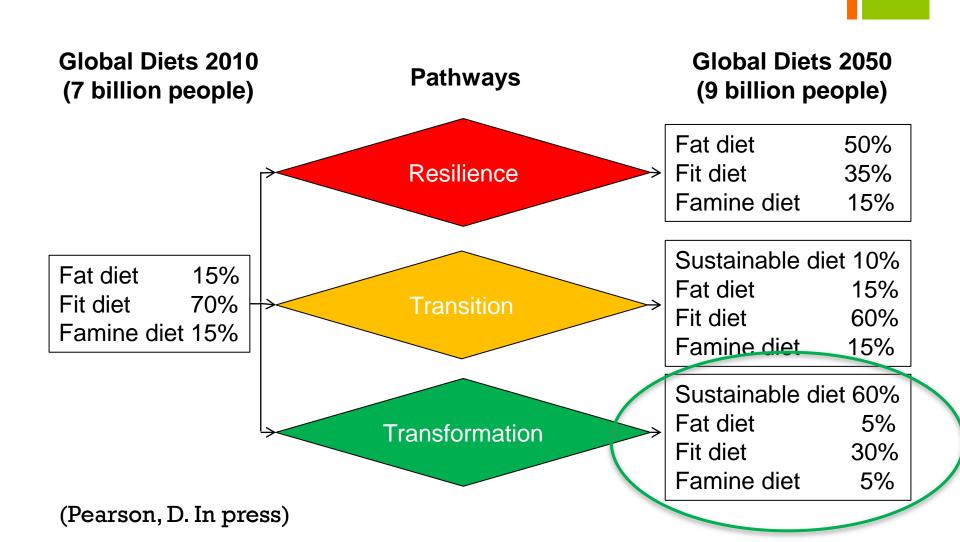
Transition

- Involves incremental changes whilst still maintaining existing system
 - Focus on marginal improvements

Transformation

- Requires radical changes in political, economic and social structures and discourses
 - increasingly being seen as essential for achieving a sustainable society



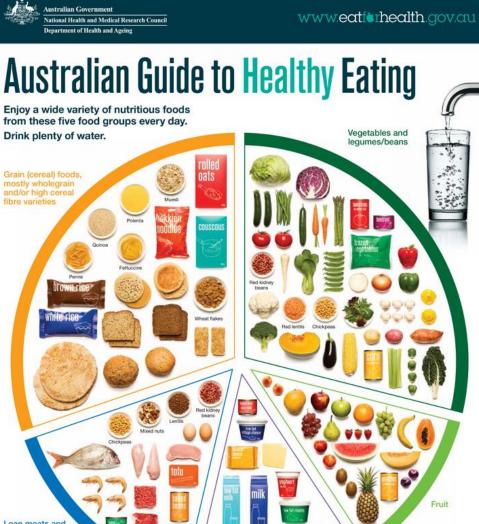


+ Features of a Healthy Diet

- Be physically active and choose amounts of nutritious food and drinks to meet individual energy needs that maintain a healthy weight
- Drink plenty of water whilst eating a wide variety of foods from the five groups every day:
 - Vegetables, including different types and colours, and legumes/beans
 - Fruits
 - Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties
 - Lean meats and poultry, fish, eggs, tofu, nuts and seeds, and legumes/beans
 - Milk, yoghurt, cheese and/or their alternatives
- Limit intake of alcohol and foods containing saturated fat, added salt and sugars.
- Support breastfeeding
- Prepare and store food safely

(NHMRC, 2013)





Irink

Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans

> Milk, yoghurt, cheese and/or alternatives, mostly reduced fat

Use small amounts



Only sometimes and in small amounts





There is presently a lack of knowledge regarding what constitutes a sustainable diet (and consumers likely acceptance of it).

Consequently, decision makers are currently unable to develop policies to alter unsustainable dietary habits.



+ Features of a Sustainable Diet

Food product:

- adjusting consumption of meat to recommended dietary amount
- adjusting consumption of dairy products to recommended dietary amount
- adjusting consumption of junk food to amount for optimal enjoyment
- hydrating from tap water rather than purchasing it in a bottle

Source of food product:

- minimising consumption of out-of-season products, particularly fresh fruits and vegetables
- minimising consumption of fish from non-sustainable sources
- increasing consumption of food from environmentally enhanced sources, such as certified organic
- reducing purchases of foods with packaging which is above that required for product protection
- reducing food transport by selecting more local options
- favouring less processed foods

Behaviours around food provisioning:

- reducing food waste, and recycling unavoidable waste
- reducing energy use in food purchases, storage and cooking





⁽Pearson et al In press)

REDUCING MEAT CONSUMPTION

"Scientists agree... no more than 100 grams... of meat per day... substantial reductions in consumption in developed countries and constrained growth in demand in developing ones" (UNEP 2012 Global Environmental Alert Service, Oct)



REDUCING DAIRY



"Livestock's contribution to environmental problems is on a massive scale" (FAO 2006 Livestocks Long Shadowxxi)

EEREE



REDUCING FOOD WASTE

"...we humans waste about 40 per cent of our food on its journey from the farm to our fork." (Dr Karl Kruszelnicki, Foodwise)

Monteilus



REDUCING JUNK FOOD

"eating junk food... it's fun at the time, but ultimately not the best choice. (Dita Von Teese, Actor)



REDUCING BOTTLED MATER

"...1 billion people lack access to safe drinking water while other people spend billions on a bottled product that... harms the environment and costs up to 2,000 times the price of tap water." (Annie Leonard, creator of The Story of Bottled Water)



REDUCING ENERGY: IN PURCHASES, STORAGE AND COOKING

"... studies indicate that 30 – 40 percent of the energy used in the food chain
is by household cooking, storage, and transportation."
(Lusk etal 2011 Economics of Food Consumption and Policy)



REDUCING FOOD MILES

"Cheap fossil fuel energy makes intensive agriculture and long-distance transportation economically viable... Prices in shops do not reflect the full cradle-to-grave environmental and social costs." (Angela Paxton, author of the Food Miles Report)



REDUCING PACKAGING

"over 4.2 million tonnes packaging in Australia every year... could be dramatically reduced by consumers making smarter choices." (Nola James, Australian Food and Grocery Council)



REDUCING UNSUSTAINABLE FISH

"If you want to maintain a sustainable supply of fish you have to farm the fish, rather than mine them" (Maurice Strong - Lead author of world's first 'state of the environment report in 1972)



Marine Stewardship Council Certified sustainable seafood

INCREASING SUSTAINABLE FOOD

"Every major food company now has an organic division. There's more capital going into organic agriculture than ever before." (Michael Pollan author of Omnivors Dilemna)





INCREASING BEAN AND LEGUME

"a shift towards less animal based and more plant-based diets, rich in legumes, would be beneficial from an environmental perspective" (Elinor Hallström, The Role of Legumes For Sustainable Eating)



INCREASING FRESH FRUIT AND VEGETABLE (WHILE REDUCING OUT-OF-SEASON)



"Reducing meat and increasing vegetable consumption has a host of positive benefits for our health and can ease our footprint on the environment" (Dr. Robert Lawrence, Director of the Johns Hopkins Center for a Livable Future)

INCREASING UNPROCESSED FOODS

"Get people back into the kitchen... combat the trend toward processed food and fast food. (Andrew Weil – Founder of Integrative Medicine)

INCREASING ENJOYMENT OF FOOD

"I was certain that... if you eat together as often as possible, and demonstrate your own enjoyment of flavour and conviviality, that a child will eat well forever"

(Stephanie Alexander - food author and creator of School Kitchen Garden program)





Current research project

'Shrinking the food-print by creating consumer demand for sustainable and healthy eating'

ARC Discovery Project 2013-15 \$310,000

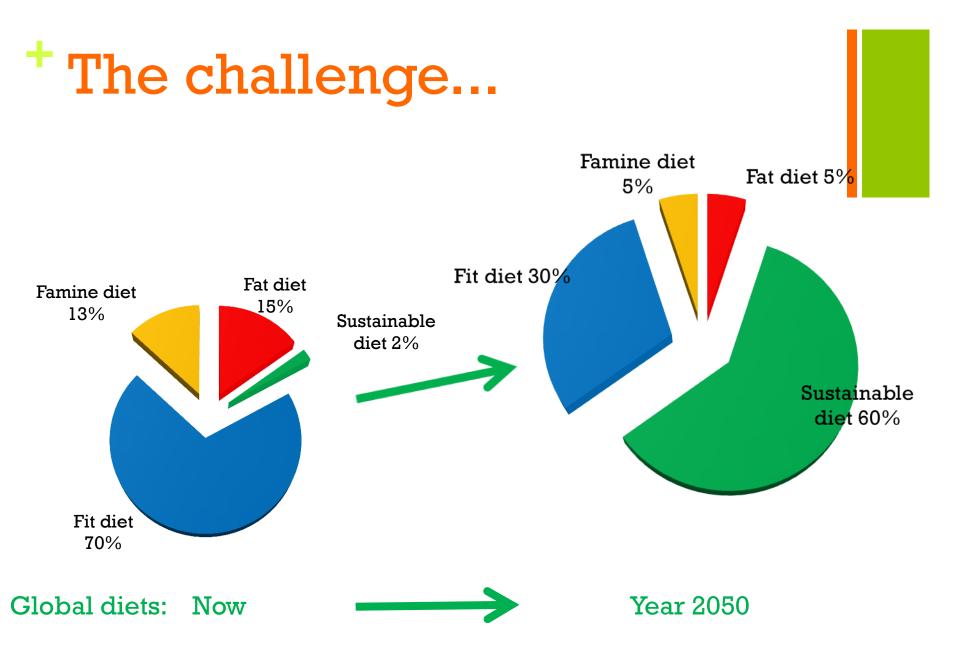
Chief Investigators: David Pearson (University of Canberra), Sharon Friel (Australian National University), Mark Lawrence (Deakin University)

- Gain understanding of consumptive drivers that shape food demand in Australia
- Contribute to an emerging global discussion on potential impact to food systems of changes in consumer choices
- Provide options and encouraging citizens to make considered choices



Australian Government

Australian Research Council



Conclusions for a Healthy and Sustainable Diet

 Policy should be oriented in such a way that encourages people to consume less, consume smarter and minimize waste.

Optimal impact will be achieved when policy is targeted in high impact areas where consumers are willing to change - eg. minimizing consumption of 'junk' food, and reducing food waste

Questions and comments...

Future research opportunities and collaborations....

FOOD MATTERS RESEARCH PROGRAM

WWW.CANBERRA.EDU.AU/RESEARCH/FOOD



+ References

Food and Agriculture Organisation (FAO) (2010) Sustainable diets and biodiversity Proceedings from International Scientific Symposium, 3-5 Nov, Rome.

Ingram J (2011) A food systems approach to researching food security and its interactions with global environmental change Food Sec. 3:417–431

NHMRC (2013). *Australian Dietary Guidelines*. Canberra: National Health and Medical Research Council.

Pearson, D. Friel, S. and Lawrence, M. (In press) *Building environmentally* sustainable food systems on informed citizen choices: Evidence from Australia Biological Agriculture and Horticulture.

Pearson, D. (In press) Changes in consumer behaviour required for environmentally sustainable diets: Food Marketing's potential contribution Journal of Food Products Marketing.

Acknowledgements

Funding provided by: Australian Research Council and University of Canberra