

MESSAGES FROM THE WHOLE GRAIN SUMMIT 2017



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OUTLINE

INTRODUCTION : NCD in Indonesia and Its Risk Factor

KEY GOALS AND ACTION POINTS OF VIENNA WHOLE GRAIN DECLARATION

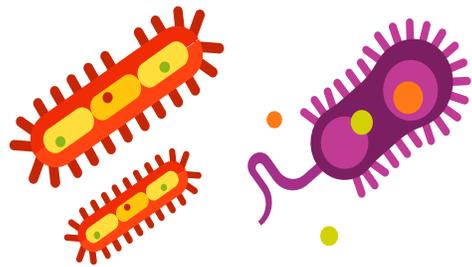
- 1. Definition of Whole Grain and Whole-Grain Foods**
- 2. Intake Recommendation**

- 3. Sustainability**
- 4. Promotion and Education**

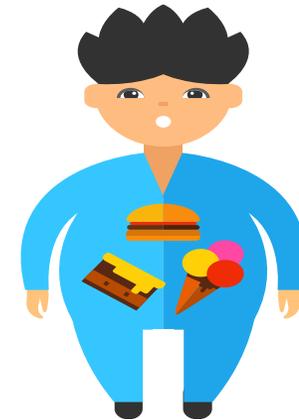
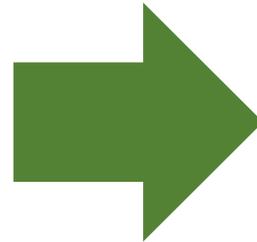
CONCLUSION AND RECOMMENDATION

INTRODUCTION : NCD in Indonesia and Its Risk Factor

EPIDEMIOLOGICAL TRANSITION OF DISEASES



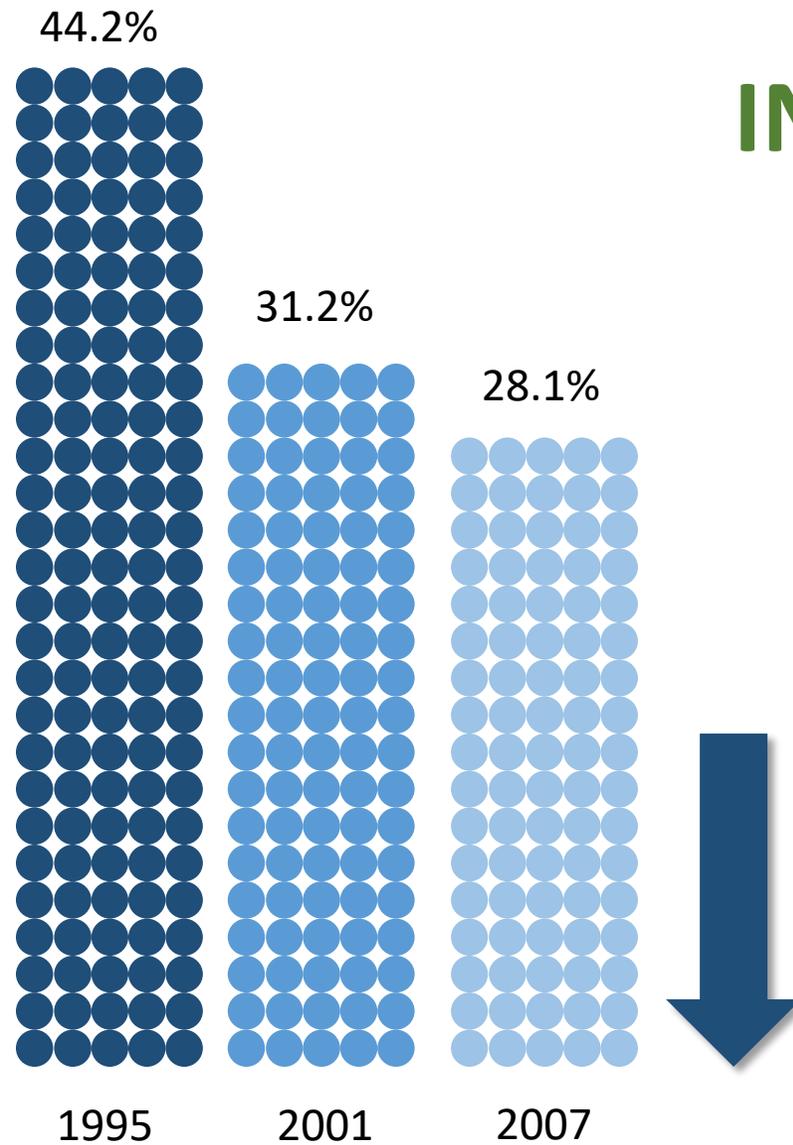
INFECTIOUS DISEASES



**NON COMMUNICABLE
DISEASES**

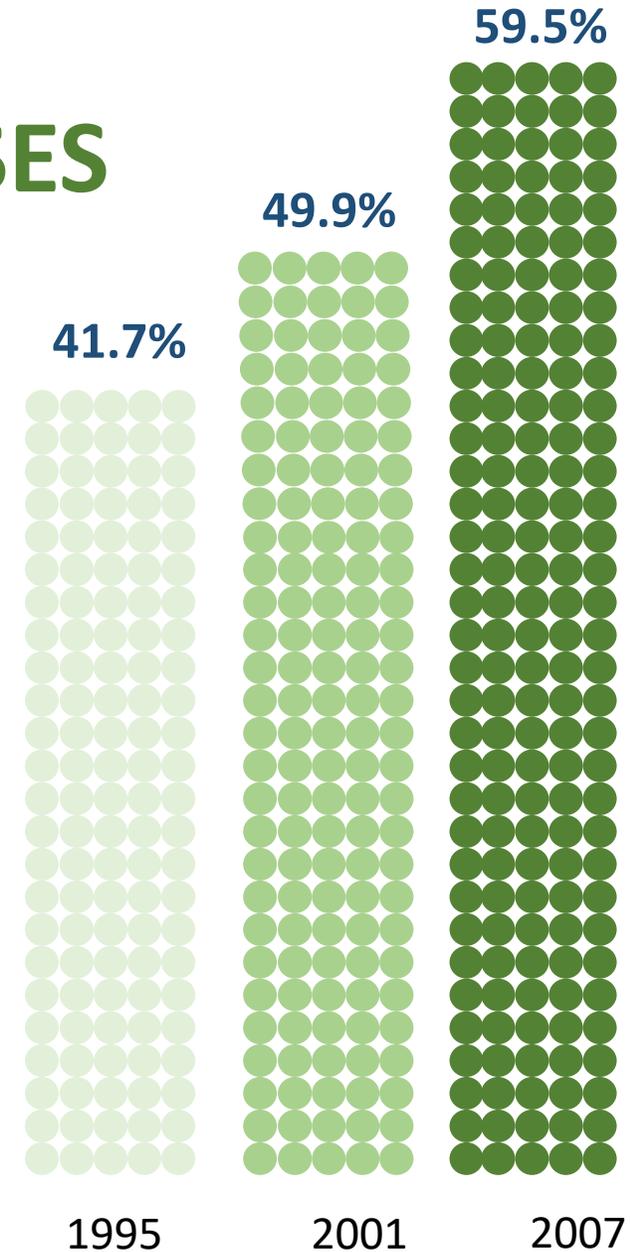
TREND OF INFECTIOUS DISEASES

Source : MOH RI, 2012



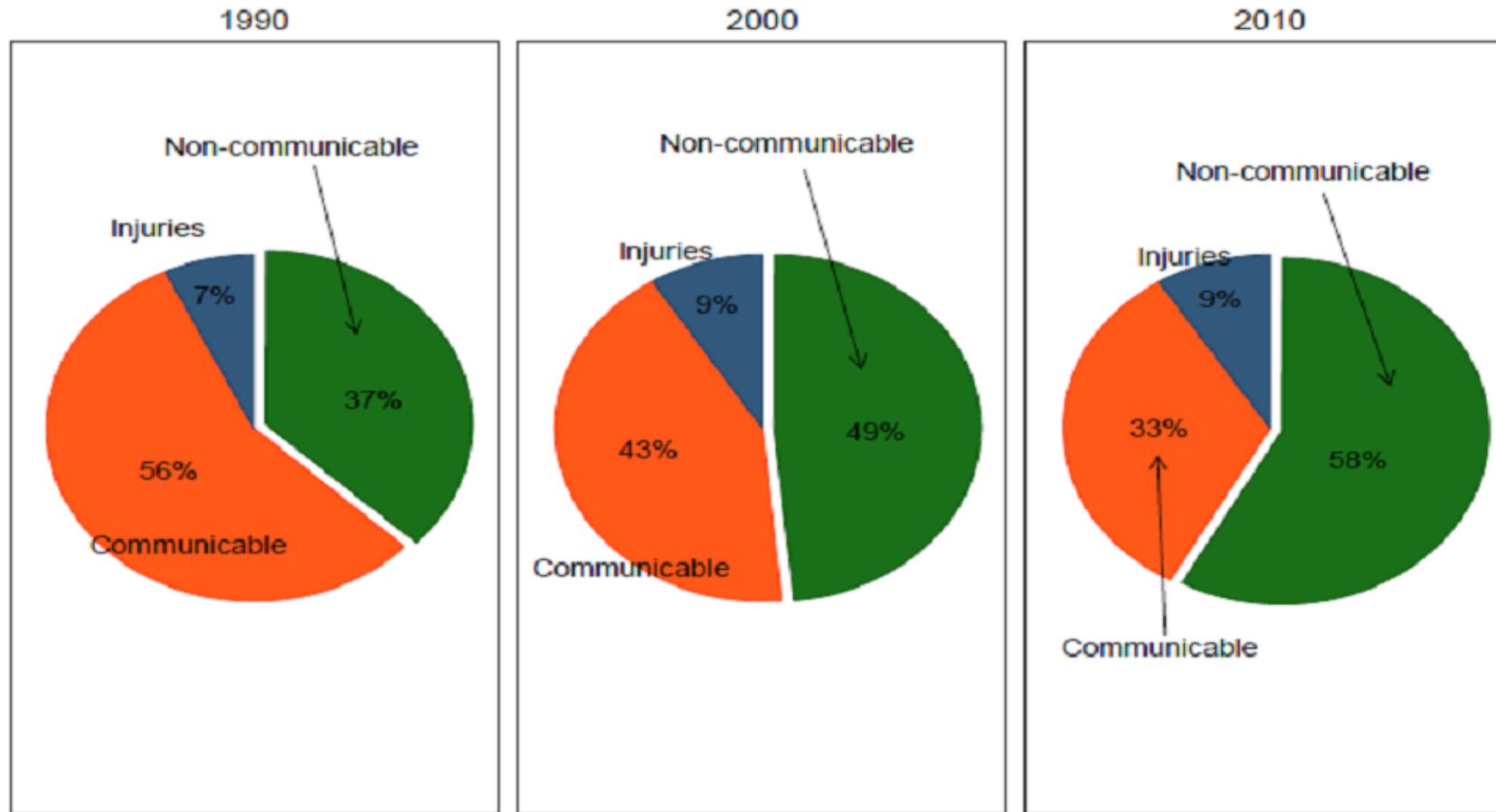
TREND OF NON INFECTIONOUS DISEASES

Source : MOH RI, 2012

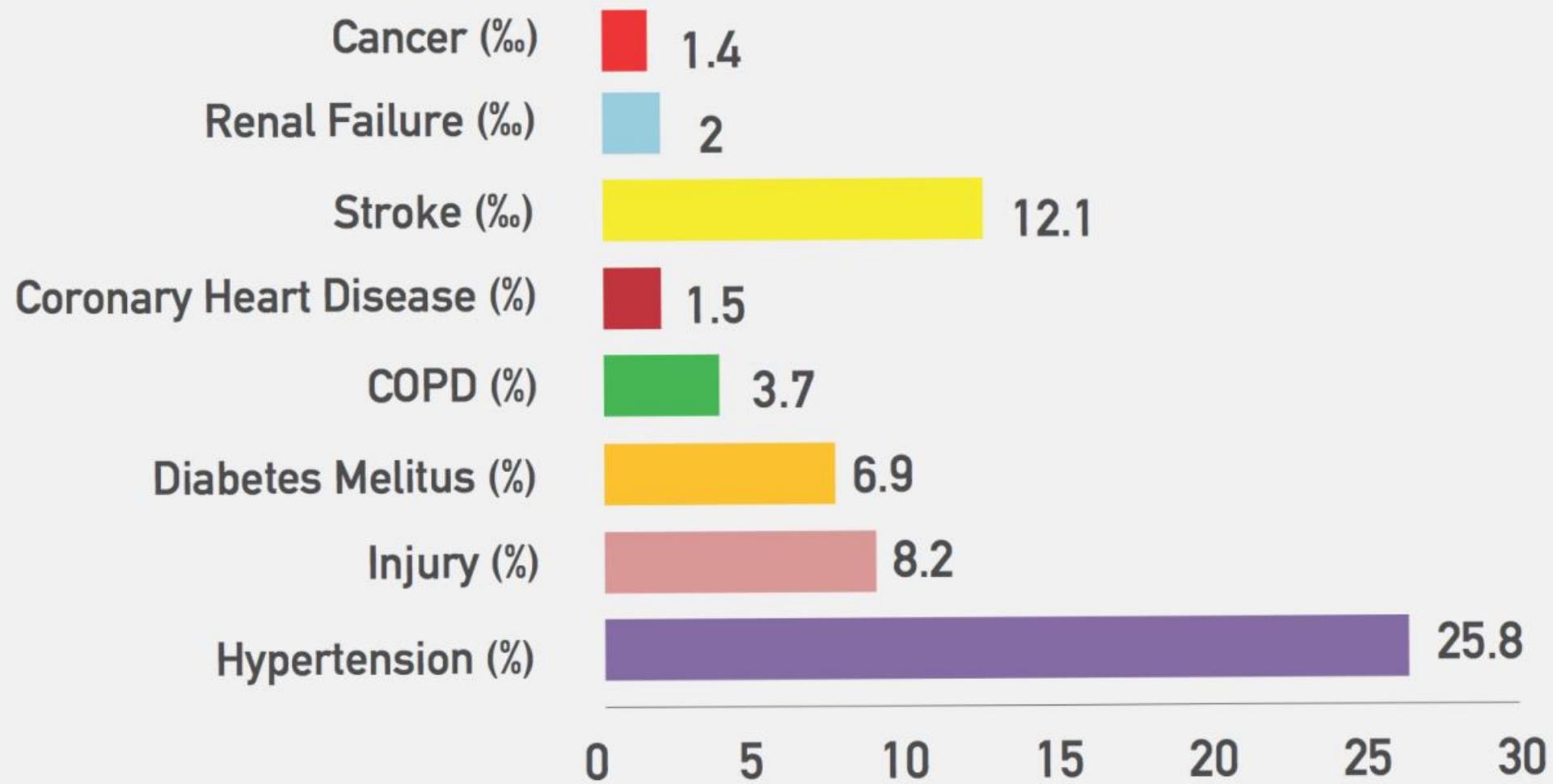


NCD's BECOME MORE PREVALENT IN INDONESIA

Burden of disease by cause in Indonesia, 1990-2010



Source: IHME

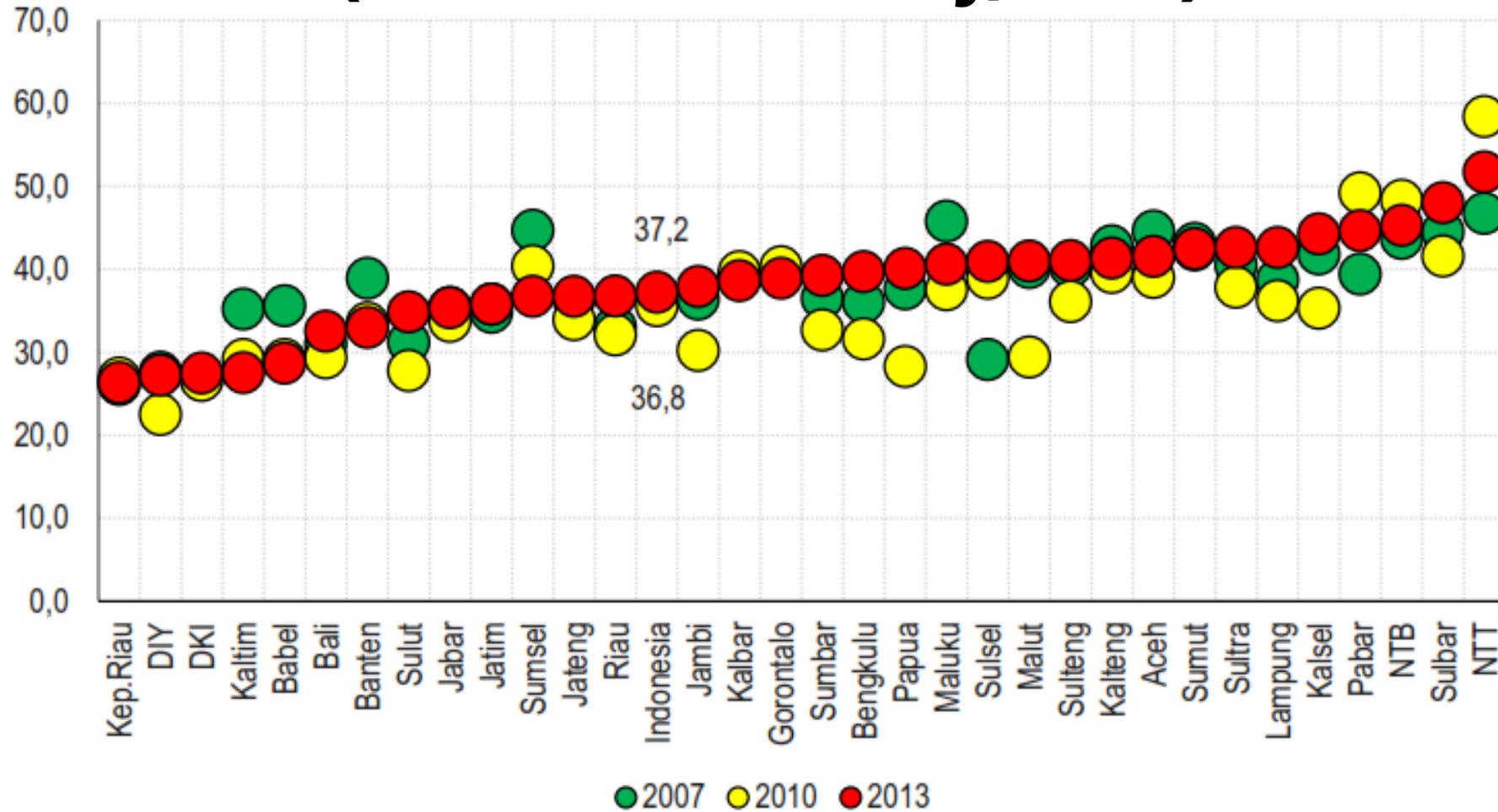


Source : National Health Survey 2013

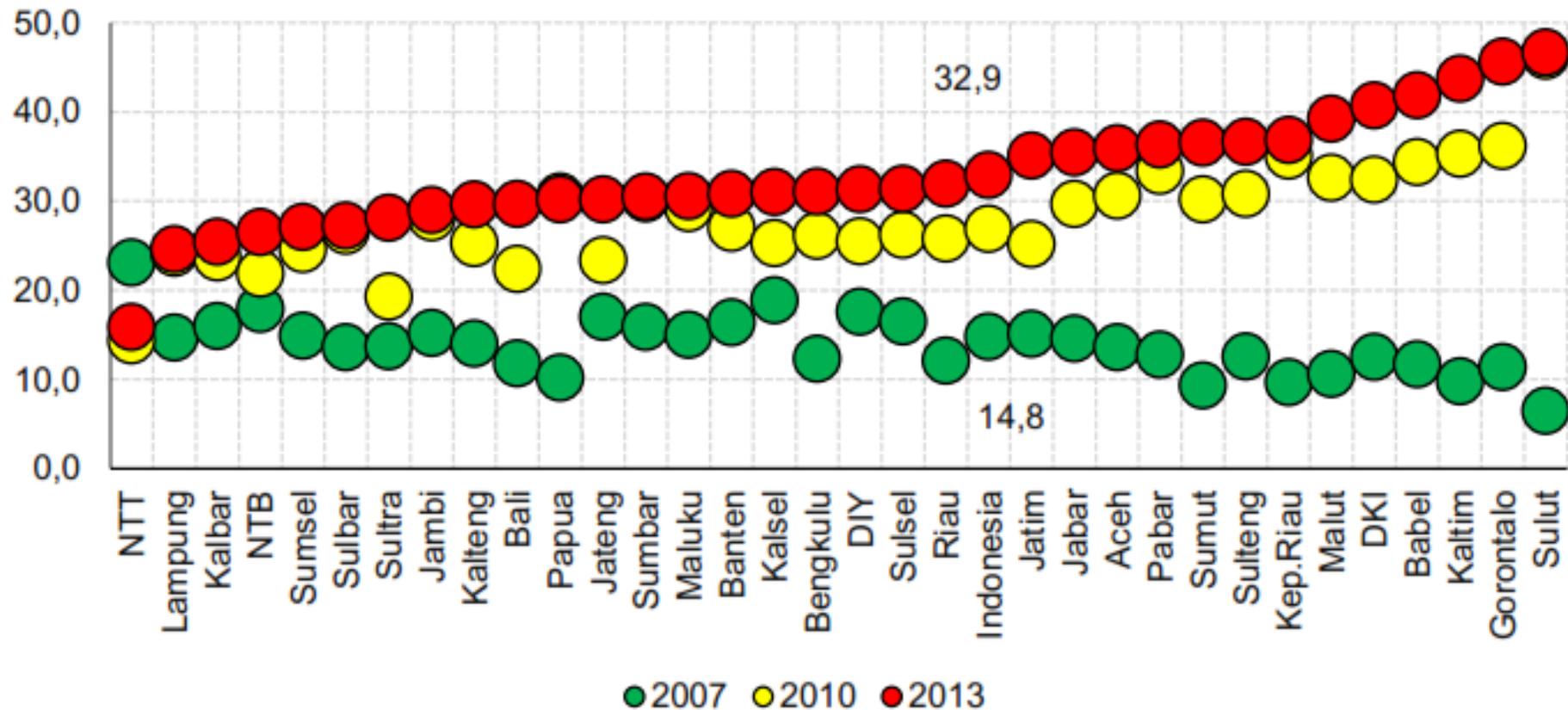
MODIFIABLE RISK FACTOR OF NCD	METABOLIC RISK FACTOR OF NCD
PHYSICAL INACTIVITY	RAISED BLOOD PRESSURE
TOBACCO USE	RAISED TOTAL CHOLESTEROL
ALCOHOL USE	ELEVATED BLOOD GLUCOSE
UNHEALTHY DIETS	OVERWEIGHT AND OBESITY

1. WHO. Diet, Nutrition and the Prevention of Chronic Disease (2003); 2. WHO. Preventing chronic diseases: a vital investment. 2005.; 3. WHO. Global Strategy on Diet, Physical Activity and Health (2005)

Prevalence of Stunting among Under Five Years Old Children in Indonesia (Basic Health Survey, 2013)

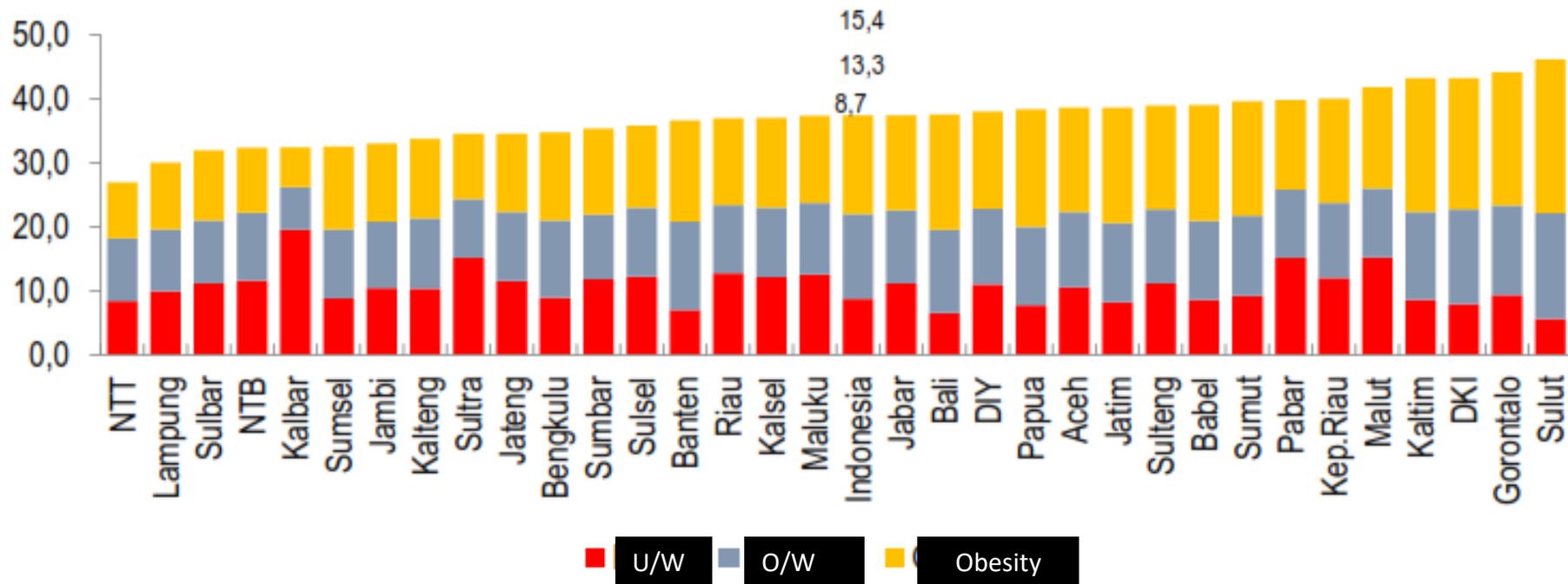


Prevalence of Obesity among adult women (Basic Health Survey, 2013)

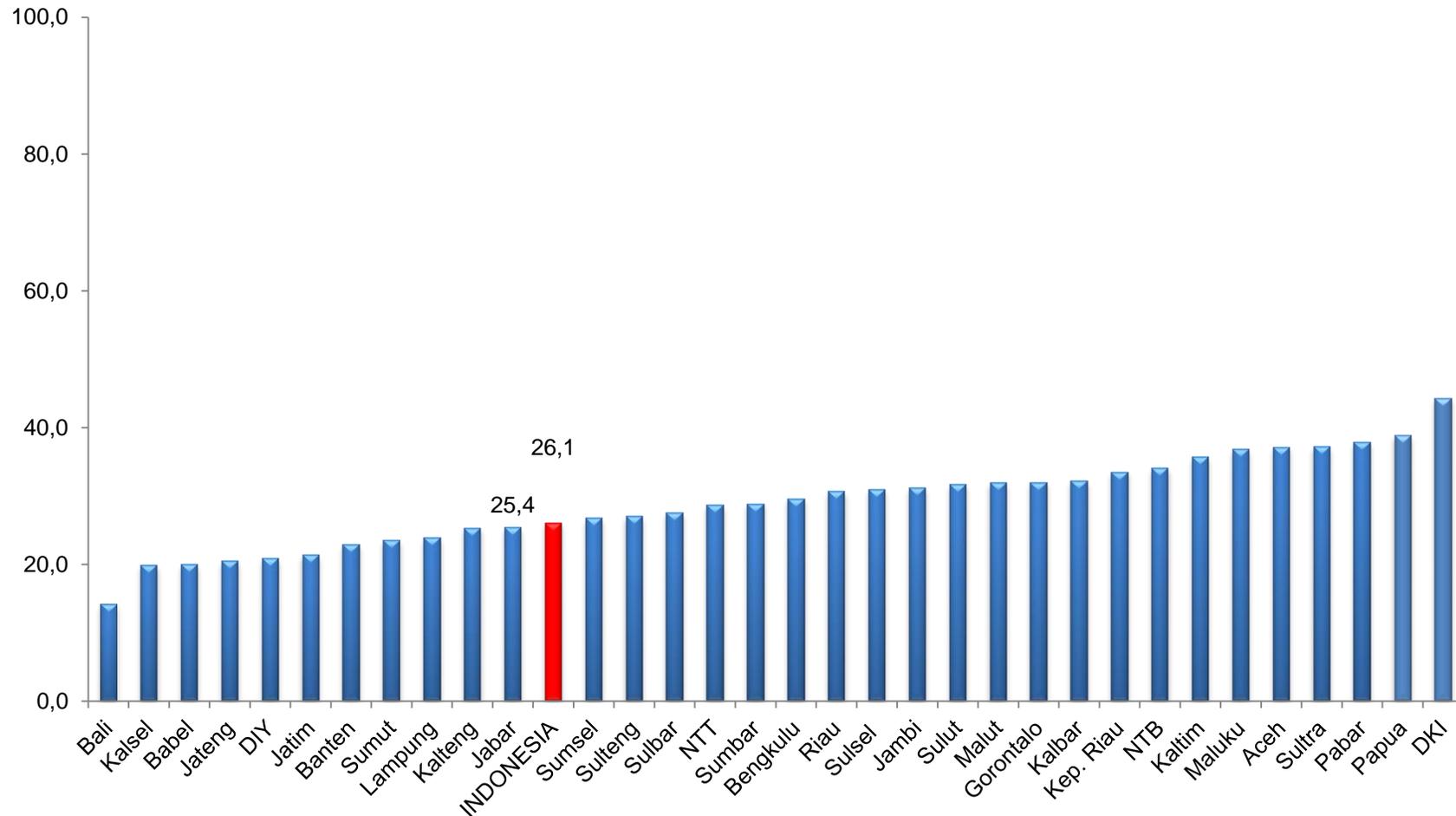


Prevalence of Underweight, Overweight, and Obesity among Adult (Basic Health Survey, 2013)

The rise of over nutrition exceeding under nutrition



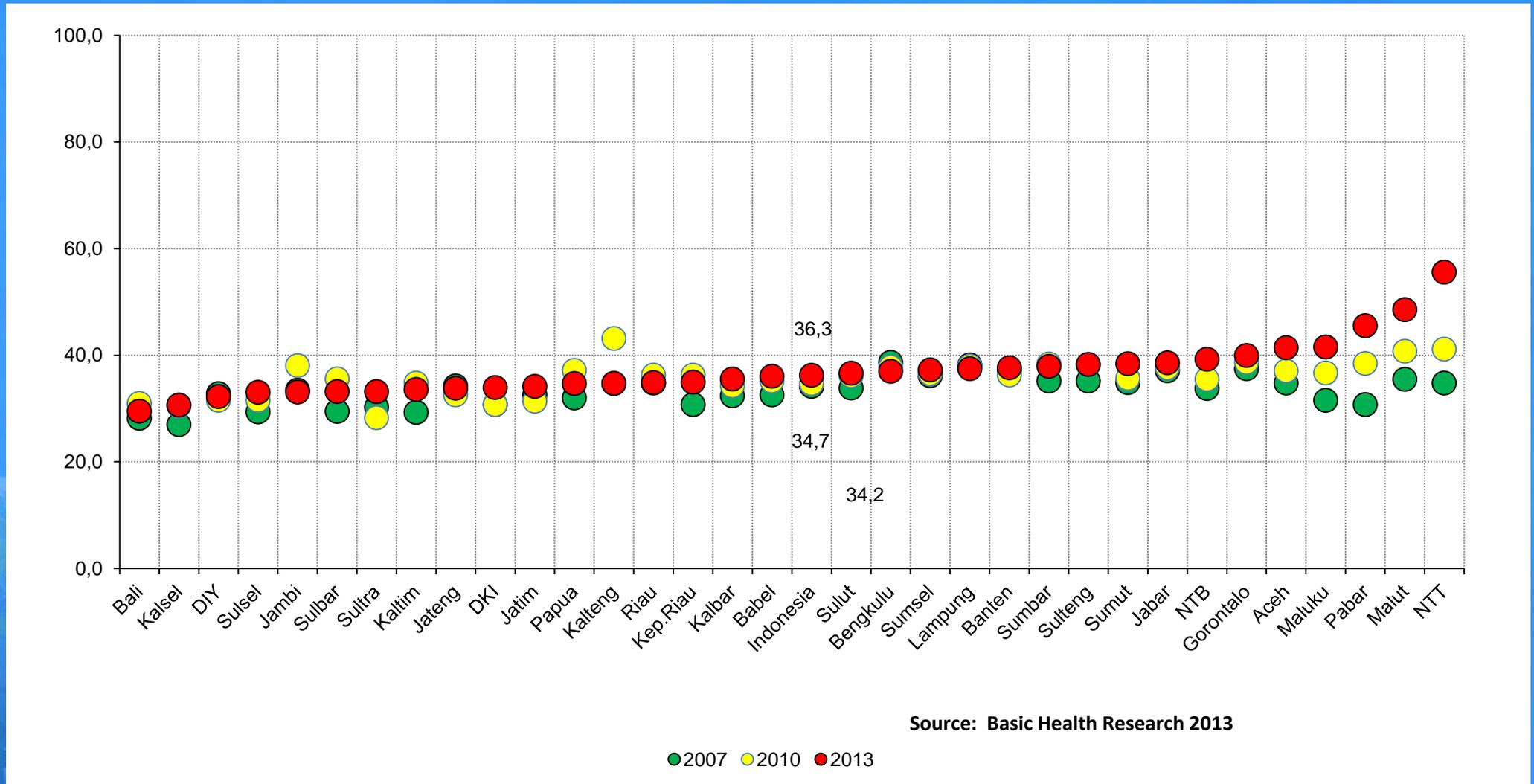
Proportion of > 10 years old People with Low Activity Level, 2013



Source: Basic Health Survey 2013



Smoking Habit according to Provinces in Indonesia, 2007-2013



Source: Basic Health Research 2013

Unhealthy and Unbalanced Diet



Source : MOH Indonesia, 2018

KEY GOALS AND ACTION POINTS
VIENNA WHOLE GRAIN DECLARATION

**A Call to Action for Increasing
Whole Grain Intake**

**from the participants of the 6th International
Whole Grain Summit in Vienna 2017**

PREAMBLE

- For over three decades, repeated studies have clearly demonstrated that people eating more whole grains have reduced risks of many diseases compared to those eating less.
- This has led many countries to adopt specific recommendations for people to choose whole grain-based foods instead of refined grain-based foods.
- Yet current data suggest that whole grain intake in most countries remains well below existing recommended levels, which is a concern for long-term public health.

- For this reason, more than 200 renowned experts and leading stakeholders, representing more than 35 countries, came together at the 6th International Whole Grain Summit, 13-15 November 2017 in Vienna, Austria, with the common goal of creating a collective action plan to increase whole grain intake worldwide, for the health and well-being of all people.
- There are 4 Key Goals and Action Points declared

	Key Goals	Action Points
1	Definitions Reach consensus on a global definition of a whole grain (raw materials) and on the definition of a whole grain food	<ul style="list-style-type: none">• Convene a global working group including key grain science groups and experts from diverse regions, to finalize a definition of whole grain and whole-grain food

Definition of Whole Grain and Whole Grain Foods

- Several definitions of whole grain have been suggested by different association/forum/council : AACC, European HEALTHGRAIN Forum, US-FDA, The Whole Grains Council
- Definition of 'whole-grain foods' is needed both to be used in scientific publications and within the food industry.
- For the purpose of labelling of whole-grain foods, accurate definition is needed to differentiate the terminology of foods made entirely with whole grains, those where the majority of grains are whole (whole-grain rich) and foods that contain more refined grain than whole grain.

Whole Grain Definition and Regulation in Indonesia

There is Existing Regulations Related to the Definition of Whole Grains and Wholegrain Foods	The Regulations Include Requirements for Minimum Amounts of Whole Grains in Certain Foods	There are Labelling Requirements or Options for Wholegrain Foods	Regulation Allow Content Claims Related to Whole Grains	Regulation Do Not Allow Any Health Claims Related to Whole Grains
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	Key Goals	Action Points
2.	<p>Intake Recommendation</p> <p>Reach consensus on recommended quantitative whole grain intake, backed up by both health and economic research.</p>	<ul style="list-style-type: none"> • Document the health evidence for a specific whole grain intake recommendation. • Commission an evaluation of the economic impact on health care costs, productivity and other factors, from following such an intake. • Prepare a report detailing the intake recommendation and its economic impact, that can be delivered to policy makers globally.

DIETARY FIBER RECOMMENDATION

Area/Authority	Adult target	Additional content
WHO	>25 g/d	“From whole grains, fruits and vegetables...”: ↓CVD, ↓T2D
Australia/New Zealand	30g/d M, 25g/d F	“Enjoy wholegrain/high fibre cereal [foods]...”: ↑laxation, ↓[CHOL]plasma, ↑glycaemic control
EFSA	25g/d	↑ bowel function
Germany, Austria, Switzerland	>30g/d	↓obesity, ↓T2D, ↓BP, ↓CHD, ↓CRC
Ireland	-	↓ bowel disease
Netherlands	14g/1000kcal/d	“Eat more plants, less animals...” ↓T2D, ↓CVD, ↓CRC, ↓breast cancer
Nordic countries	30g/d M, 25g/d F	↓CRC, ↓CVD, ↓T2D, ↓breast cancer, ↓obesity
Spain	>25 g/d	Target based on 75 th %ile of intake
UK	30g/d	↓T2D, ↓CVD, ↓CRC
USA, Canada	14g/1000kcal/d	↓CVD, ↓obesity, ↓T2D, ↑ digestive health

Buyken et al., (2018) *EJCN* Available online

Source : Dr Iain Brownlee
 CSIRO Nutrition & Health Program, Australia
 Newcastle Research and Innovation Institute Singapore

- In addition to being a key source of energy, protein, micronutrients and phytochemicals to the diet, whole-grain cereals are an important source of different dietary fibers. Increased consumption of whole grains improves the overall quality of the diet and in particular is a good way to increase dietary fibers intake.

Whole grain and refined grain consumption and the risk of type 2 diabetes: a systematic review and dose–response meta-analysis of cohort studies

**Dagfinn Aune · Teresa Norat · Pål Romundstad ·
Lars J. Vatten**

Our results support public health recommendations to replace refined grains with whole grains and suggest that at least two servings of whole grains per day should be consumed to reduce type 2 diabetes risk.

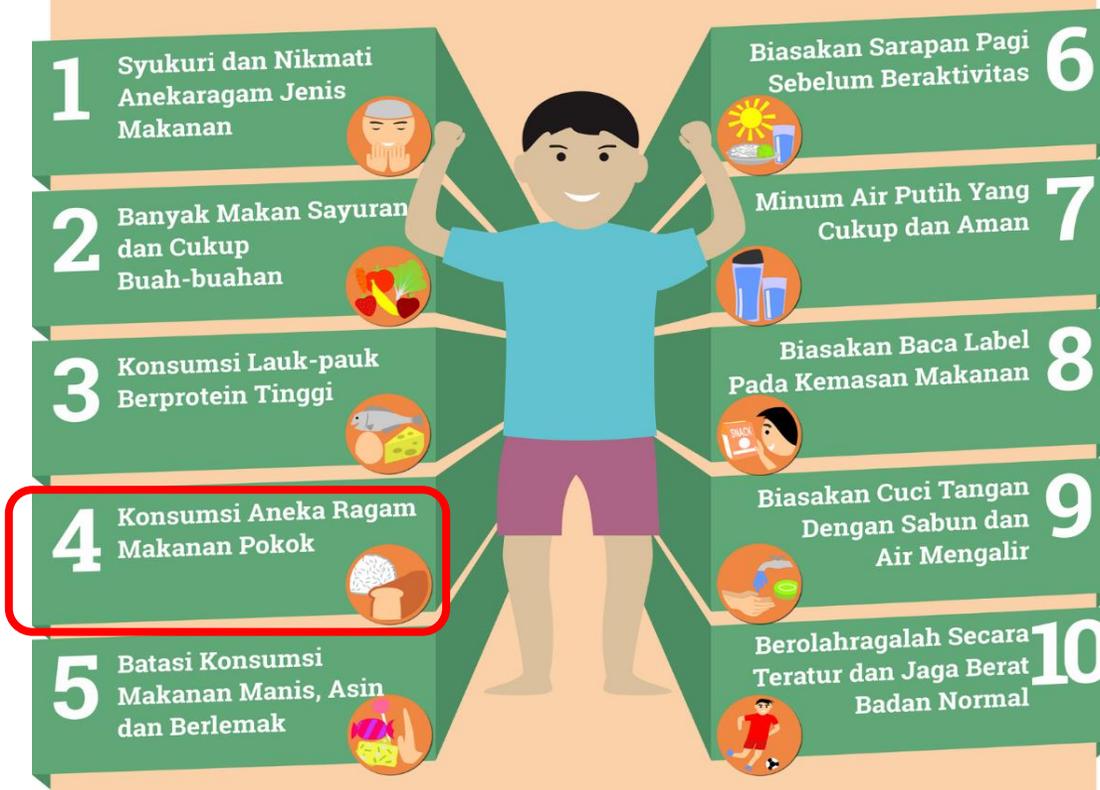
FOOD BASED DIETARY GUIDELINES

- Grain foods are universally recognized as the basic part of dietary recommendations at the position together with carbohydrate-rich sources to provide dietary energy and other nutrients including dietary fiber. In some countries, no distinction is made between cereal types and whole grains are not generally specified.

10

PESAN GIZI

SEIMBANG



4. Biasakan mengonsumsi aneka ragam makanan pokok

Makanan pokok adalah pangan mengandung karbohidrat yang sering dikonsumsi atau telah menjadi bagian dari budaya makan berbagai etnik di Indonesia sejak lama. Contoh pangan karbohidrat adalah beras, jagung, singkong, ubi, talas, garut, sorgum, jewawut, sagu dan produk olahannya. Indonesia kaya akan beragam pangan sumber karbohidrat tersebut.

Disamping mengandung karbohidrat, dalam makanan pokok biasanya juga terkandung antara lain vitamin B1 (tiamin), B2 (riboflavin) dan beberapa mineral. Mineral dari makanan pokok ini biasanya mempunyai mutu biologis atau penyerapan oleh tubuh yang rendah. Sereal utuh seperti jagung, beras merah, ketan hitam, atau biji-bijian yang tidak disosoh dalam penggilingannya mengandung serat yang tinggi. Serat ini penting untuk melancarkan buang air besar dan pengendalian kolesterol darah.

Eat variety of staple foods, including rice, corn, sorghum, millet

Wholegrain such as corn, red rice, black glutinous rice, and unrefined grains are high in dietary fibers

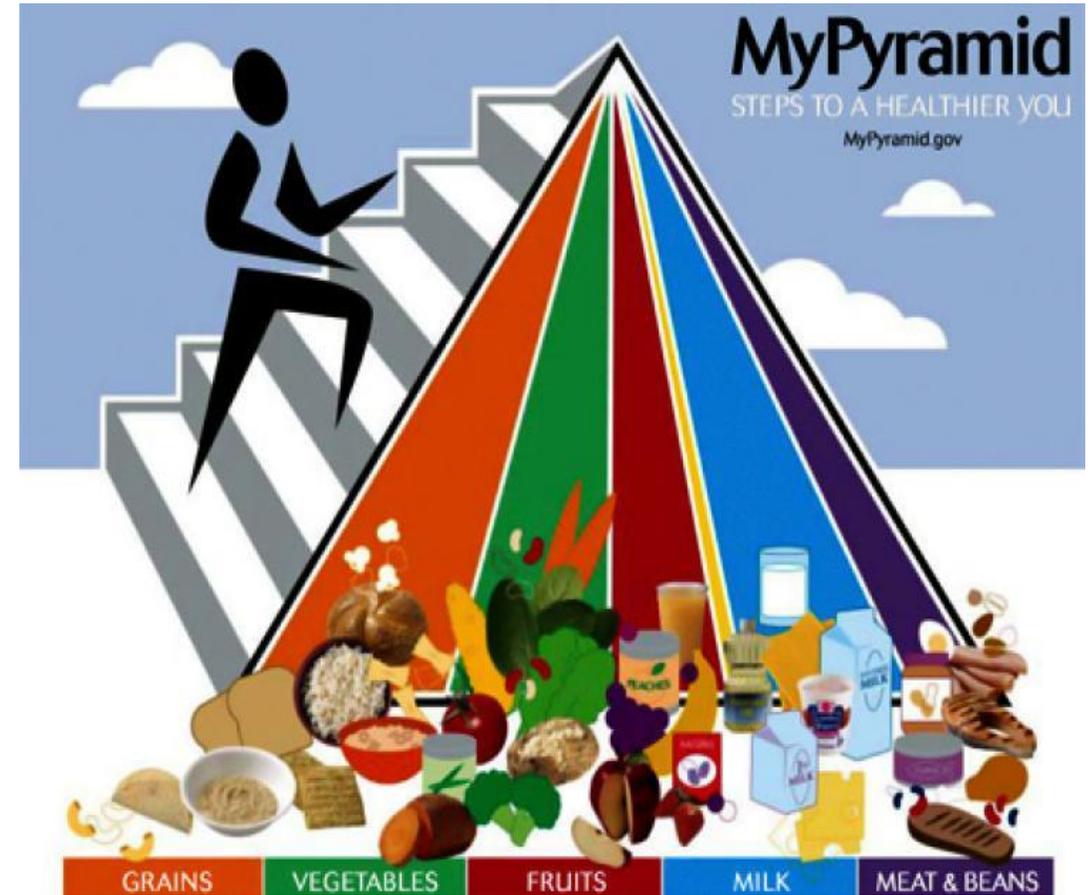
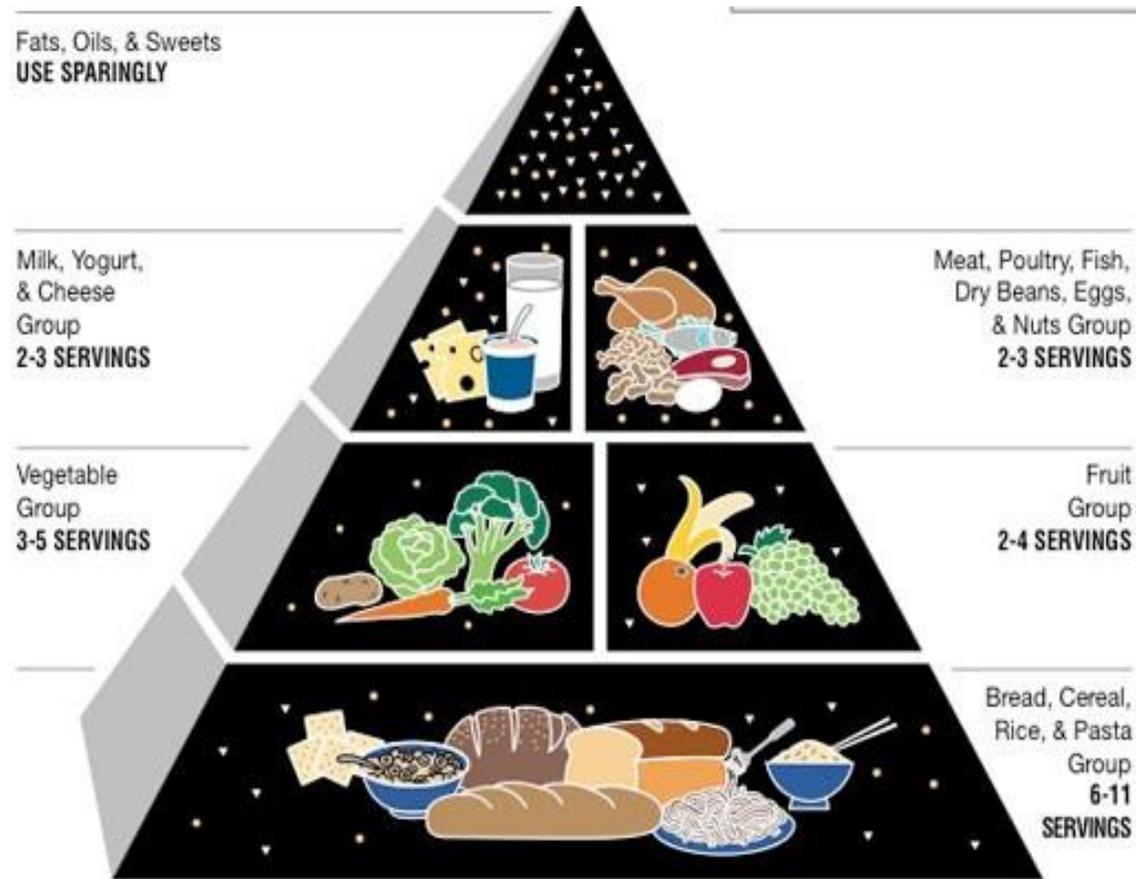
There is a Food-Based Whole Grain Recommendations from Ministry of Health)

There is No Suggestion for Whole Grain Food Portion Size or Amounts of Whole Grains in the Food-Based Recommendation

There is No Rationale for Increasing Whole Grain Intake as suggested by the Ministry of Health or other Agency

There is No Specific Tools, Educational Materials or Other Approaches to Increase Whole Grain Intake Provided by Ministry of Health or Other Agency

MyPyramid Food Guidance System 1992 vs 2005



Enjoy a wide variety of nutritious foods from these five food groups every day. Drink plenty of water.

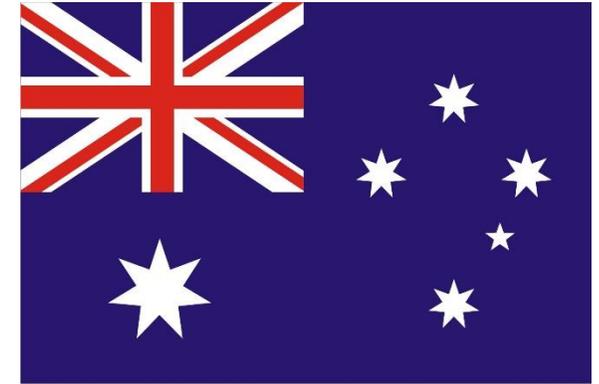
Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties



Use small amounts



Only sometimes and in small amounts

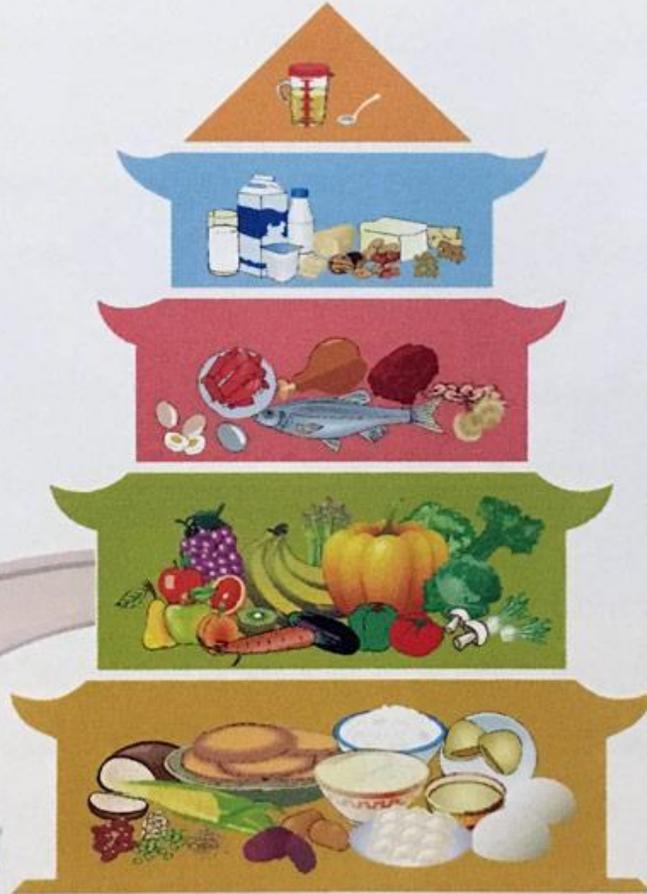


Australia

Australian Guide to Healthy Eating

1 Food Guide Pagoda

Chinese Food Guide Pagoda(2016)



Salt <6g
Cooking oil 25~30g

Milk and dairy products 300g
Soybeans and nuts 25~35g

Lean meats 40~75g
Fish 40~75g
Eggs 40~50g

Vegetables 300~500g
Fruits 200~350g

Cereals, tubers and legumes 250~400g
Whole grains and legumes 50~150g
Tubers 50~100g

Water 1500~1700ml

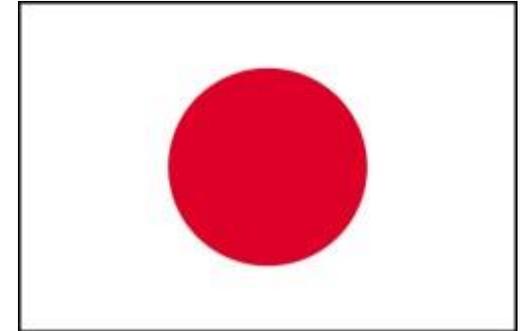
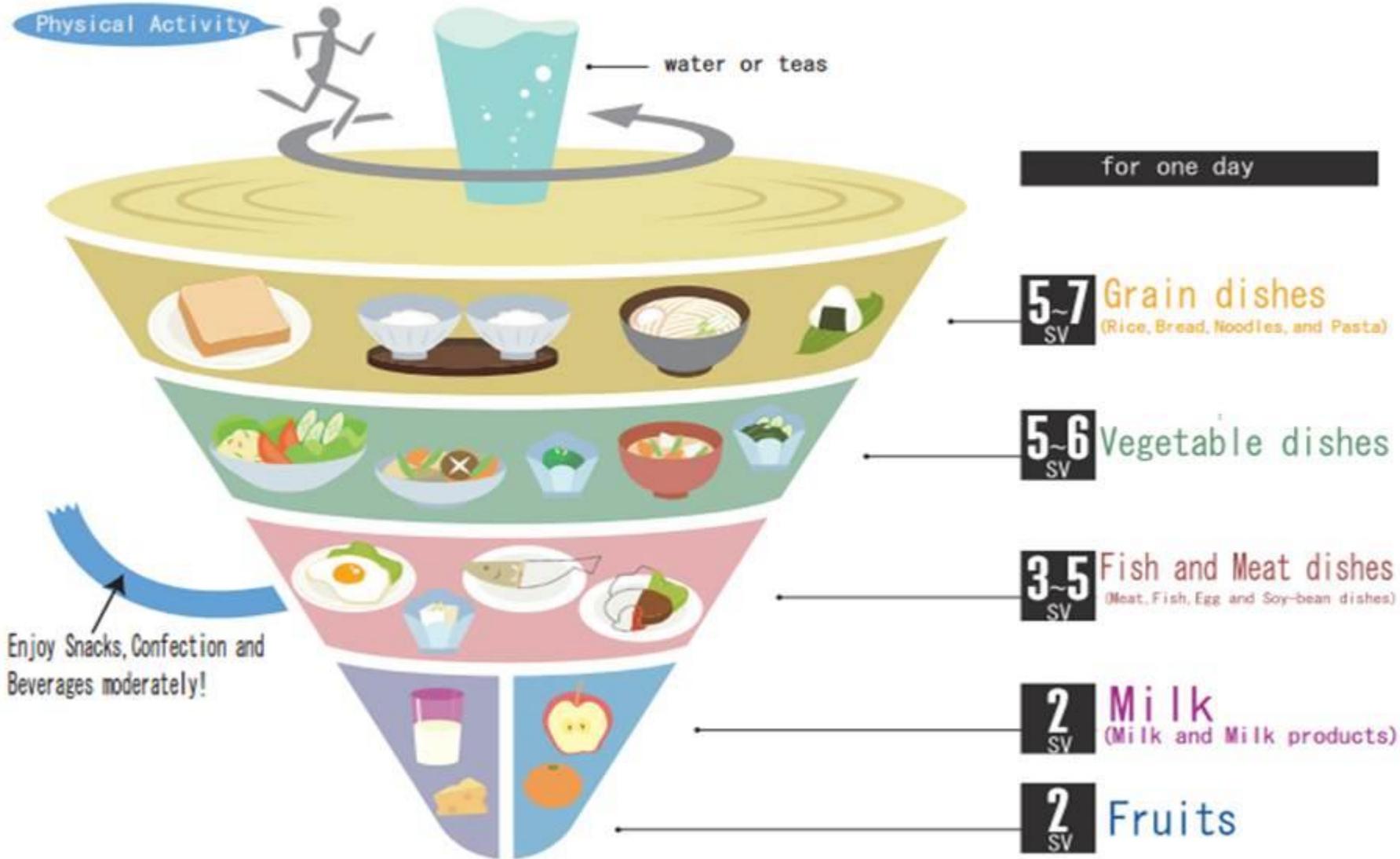


Cina

Engage in physical activities
equivalent to 6000 walking steps daily

Japanese Food Guide Spinning Top

Do you have a well-balanced diet?



Japan

※ SV is an abbreviation of "Serving", which is a simply countable number describing the approximated amount of each dish or food served to one person



Singapore

Singapore's Healthy Diet Pyramid (2009)





Singapore

No Data Intake of Whole Grain in Indonesia

There is No Estimate of Whole Grain Intake Data Available for Adults	There is No Estimates of Whole Grain Intake Data Available for Children	There is No Data Available for Changes in Whole Grain Intake over Time for Adults	There is No Data Available for Changes in Whole Grain Intake over Time for Children	No Data Exist (From Market or Nutritional Surveys) on the Types of Wholegrain Foods That Are Consumed and the Proportion That They Are Consumed in
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Brownlee et al., 2018. *Nutrients*, available online

Grains consumption data collected in the National Socio-Economic Survey consist only data from rice, glutinous rice, corn (wet and dry) and also wheat flour consumption without differentiating either whole grain or milled-grain processing.

	Key Goals	Action Points
3.	<p>Sustainability</p> <p>Reach consensus about the contributions of whole grains to sustainable diets and the health of the planet.</p>	<ul style="list-style-type: none">• Document the carbon footprint of whole grains compared to other dietary choices, in the context of growing world populations and climate change.

Can whole grain bread lower your carbon footprint ?

Whole grain bread is often promoted for the health benefits it provides as a source of dietary fiber. But how many of us consider that the use of whole grain flour in bread production can lead to a lower carbon footprint?

A study published in the International Journal of Lifecycle Assessment puts the carbon footprint of whole grain bread at 6-7% lower than that of white bread. Part of the reason is that, when milling flour for white bread, around 25% of the grain – the fiber – is thrown away.

<http://www.danisco.com/food-beverages/bakery/the-sustainability-issue/tread-lighter-with-whole-grain/>

SUSTAINABLE DIET



WHAT'S ON MY PLATE? STOP AND THINK ABOUT THE GLOBAL GOALS

HOW FAR DID MY FOOD TRAVEL TO GET TO ME?

WHO GREW OR HELPED PRODUCE MY FOOD?

WHAT WAS MY FOOD PACKAGED IN?

AM I MAKING HEALTHY CHOICES?

HOW MUCH FOOD AM I WASTING?

WHAT CAN I DO DIFFERENTLY? WHO CAN I TELL?

LET'S THINK ABOUT SUSTAINABILITY

SUSTAINABLE FOOD HABITS

ECOLOGICALLY RESPONSIBLE

- Low greenhouse gas emissions
- Soil and water quality is maintained or improved
- Biodiversity and ecosystems are protected and preserved
- Livestock are treated humanely

AIM FOR:	NEXT BEST:
<ul style="list-style-type: none"> • Certified Organic • Eating lower on the food chain • Eco-certified seafood • Sustainably harvested wild foods (hunted or gathered) 	<ul style="list-style-type: none"> • No chemical sprays • No GMO's (Genetically Modified Organisms) • Hook 'n' line caught fish • Habitat preservation (e.g., bird friendly, no dragger fishing) • Healthy & humane treatment of animals (free-range, drug & hormone-free)

FAIR AND ACCESSIBLE

- All people have access to a basic, affordable, nutritious & culturally appropriate diet
- Farmers, fishers & food workers have a livable income
- Promotes justice and fair trade in countries in the global south
- People are supported to live with dignity in sustainable rural communities

AIM FOR:	NEXT BEST:
<ul style="list-style-type: none"> • Fair trade certified • Produced by small farmers, fishers, coops, processors and businesses • Short supply chain from farm/dock to you 	

LOCAL

- Minimizes food miles traveled
- Provides high quality and freshness
- Supports local producers, businesses & communities

AIM FOR:	NEXT BEST:
<ul style="list-style-type: none"> • Food grown, raised or harvested by you or a nearby farmer/fisher 	<ul style="list-style-type: none"> • Produced/harvested in the province • Produced/harvested in the the region

HEALTHY

- Healthy food is a key foundation for healthy humans

AIM FOR:	NEXT BEST:
<ul style="list-style-type: none"> • Whole foods • Good quality, fresh, in-season 	<ul style="list-style-type: none"> • Minimal processing

NO WASTE

- Fewer resources used to meet needs
- Packaging and waste kept out of landfills
- Recycling keeps materials in circulation, but uses energy and produces emissions

AIM FOR:	NEXT BEST:
<ul style="list-style-type: none"> • No packaging • No food waste 	<ul style="list-style-type: none"> • Packaging that you will reuse • Packaging or food scraps that you will compost or recycle

SUSTAINABLE EATING FOR A BETTER WORLD

© Great Meals for a Change 2010

Food for thought, food to waste



- In Indonesia, food waste is generally disposed with recyclables and other waste as there is limited practice of waste sorting.
- Food waste amounting 315 kg per capita per year.



Aretha Aprilia
The Jakarta Post, November 7, 2013

	Key Goals	Action Points
4.	<p>Promotion and Education</p> <p>Form ongoing partnerships working together to increase whole grain consumption and to disseminate authoritative whole grain statements and campaigns globally.</p>	<ul style="list-style-type: none">• Create a “how-to” kit detailing ways to create public-private partnerships (involving entities such as WHO, FAO, nutrition non-profits, disease associations, governments, etc.) and how these partners can best work together.• Develop evidence-based fact sheets addressing popular myths/questions about whole grains and possible emotional appeals (tied to local cultures) to give these facts greater impact.

- There is No Country-Specific, Food-Based Whole Grain Recommendations From Government Organisations
- There is Professional Group or Non-Governmental Organisation (e.g., Food and Nutrition Society) Developing Food-Based Whole Grain Recommendations
- There is possibility to create public-private partnership to increase whole grain consumption
- All efforts should be accompanied with nutrition education to consumers

CONCLUSION AND RECOMMENDATION

- NCD becomes more prevalent in Indonesia.
- Whole grains consumption could reduce the burden of chronic diseases
- Increasing intake of whole grains requires efforts from several stakeholders such as agricultural sectors, health agencies and industry to provide standard definitions of whole grains and whole-grain foods and to promote their consumption.
- Currently, there is no data available on consumption of whole-grain foods in Indonesia. National socio-economic survey should include whole grain consumption in their data collection

CONCLUSION AND RECOMMENDATION (cont.)

- Promoting regulation on food product labeling to help consumers distinguish whole grain products from those with misleading claims needs to be established
- Consideration to incorporate whole grains into dietary guidelines and actively promote their consumption.
- Strong public-private partnerships to develop campaigns to encourage whole grain consumption and to increase the variety, availability and desirability of whole grain foods for the public.



Thank you very much

“IPB, serving and searching for the best”