U.S. Food Consumers
Growing Concerns About Health and Weight

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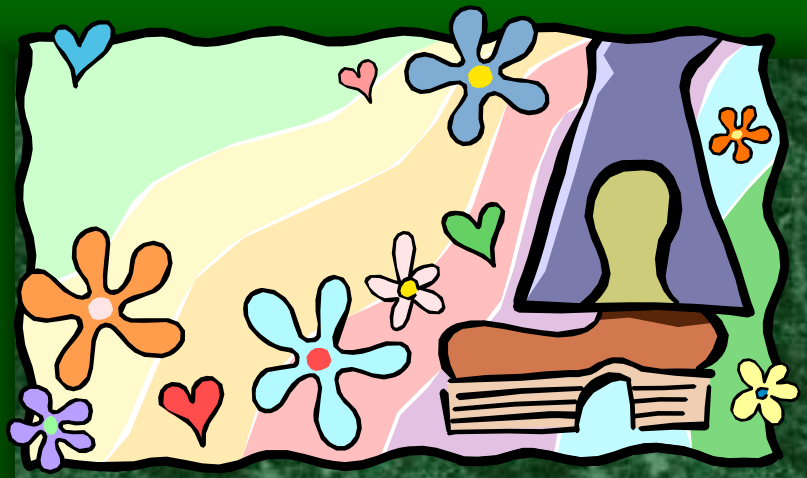


Step back to 1973…

- Hank Williams Jr. meets wild women & Jim Beam
- Disco on the horizon
- Bell bottoms and platforms are hip
- Americans spend 10% of income on food at home, 3.6 % on food out

On to 2003…

- looking for simplicity& inner peace
- we have cell phones, PDAs, wireless access and several remote controls
- 66% of adults are overweight & obese
- spend about 5% on food at home, about 5% on food out – about half of food dollars on eating away from home

1973 vs. 2003

- Soft drink consumption increased 115%
- Fluid milk consumption down about 25%
- Cheese consumption doubled
- Yogurt up 540%
- Frozen potato consumption doubled
- Vegetable consumption increased:

broccoli	carrots
bell pepper	tomatoes

Cheeseburger

20 years ago

333 Calories

Today

590 Calories

Source: National Heart, Lung, and Blood Institute

French Fries

20 years ago

210 calories

Today

610 calories

Source: National Heart, Lung, and Blood Institute

1973 vs. 2003

- Childhood overweight and obesity have tripled:
- 1973 about 5%
- 2003 rising above 15%
- estimates in Kentucky indicate 40% of 6th graders are overweight or obese

Food Purchase Habits Reported by Children and Parents' Perceptions

Purchase Opportunity	Some Days	Daily/Most Days	Parents' Perception Daily/Most days
School Lunch Line	15.4%	36.5%	49.4%
Vending, snack bars	19.4%	19.8%	11.5%
Convenience stores, vendors	21.4%	8.9%	4.9%
Grocery Stores	18.9%	10.5%	5.5%
Fast food, food court, other rest.	20.4%	11%	8.4%
Pizza Delivery	12.3%	4.6%	0.6%

ADA Foundation, Family Nutrition & Physical Activity Survey

Obesity is #1 Consumer Concern

- obesity received highest average concern rating
- most often selected as greatest concern (53%), compared to:
  - supplements (18%)
  - irradiation (15%)
  - genetically modified (12%)

Consumer Portion Distortion

Estimate of portion size of these foods:

– bread

– cooked pasta or rice

– raw leafy vegetables

– cooked/chopped raw vegetables

– cheese

– cooked lean meat, poultry, fish

What Consumers Say

The Big Picture

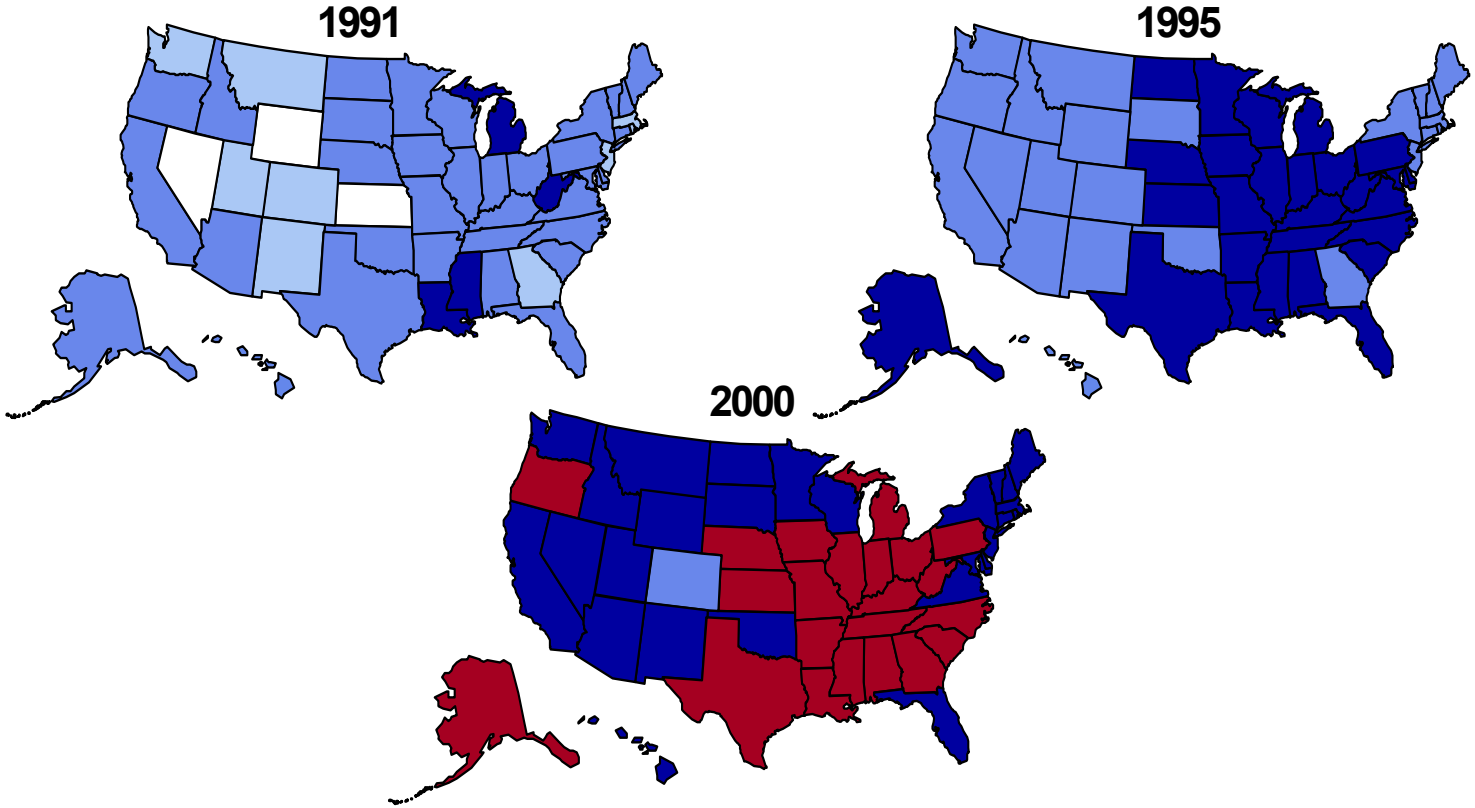
- "Genes load the gun,
  the environment pulls the trigger." (Bray 1998)

- "There has been no real change in the gene pool in this period of increasing obesity. The root of the problem, therefore, must lie in the powerful social and cultural forces that promote an energy-rich diet and a sedentary lifestyle." (Institute of Medicine 1995)

Obesity* Trends Among U.S. Adults

BRFSS, 1991, 1995 and 2000

(*BMI ≥ 30, or ~ 30 lbs overweight for 5'4" person)



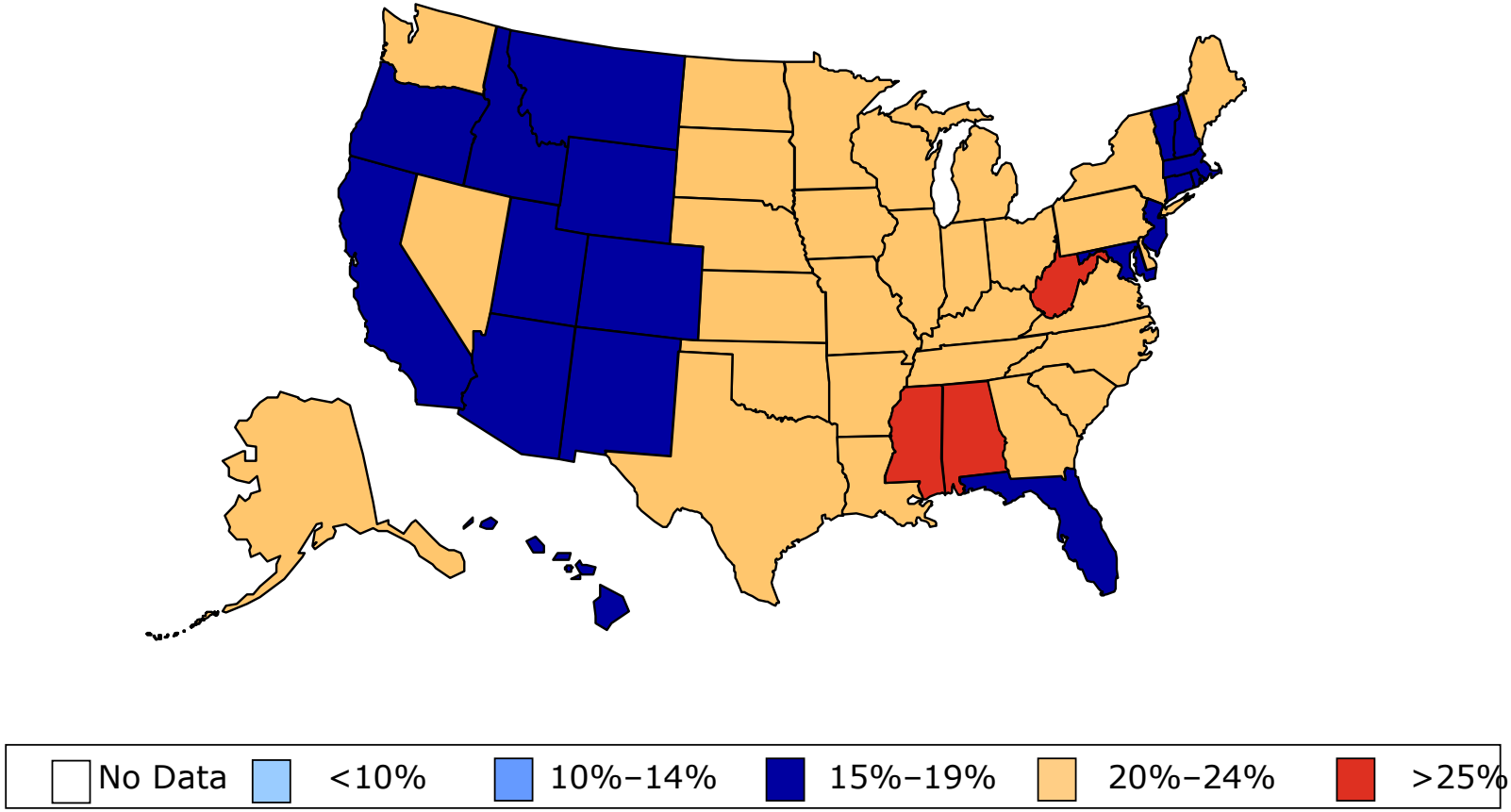
Source: Mokdad A H, et al. *JAMA* 1999;282:16, 2001;286:10.

CDC
Centers for Disease Control and Prevention

Obesity Trends* Among U.S. Adults

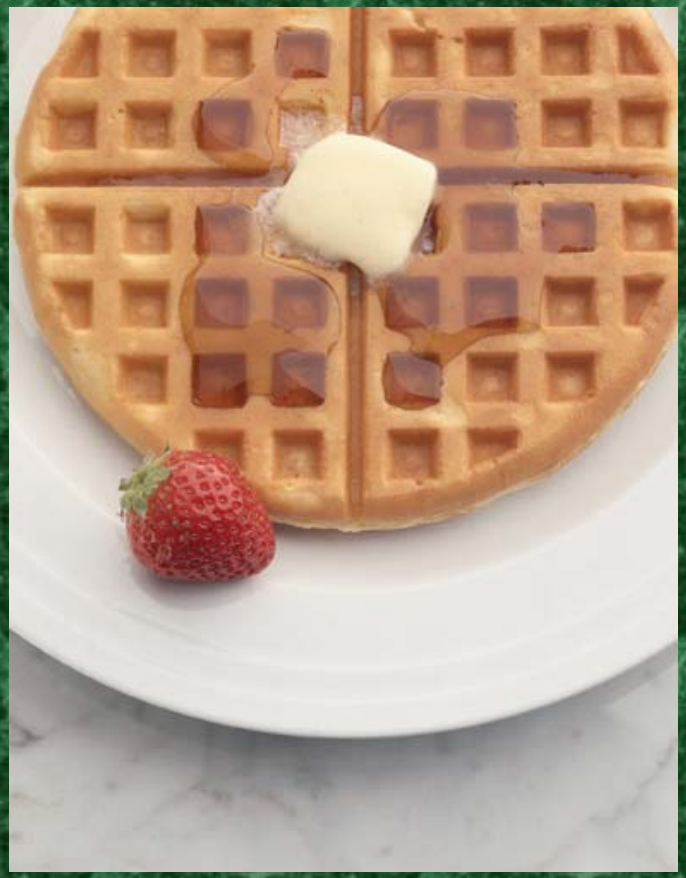
BRFSS, 2002

(*BMI >30, or ~ 30 lbs overweight for 5’ 4” woman)



Source: Behavioral Risk Factor Surveillance System, CDC

What We Have Done: U.S. Plate



- calories are up – 300 per day – that's 2100 per week – 2/3 of a pound of body fat
- the extra calories are coming primarily from carbohydrate – soda, refined grains, desserts

What We Have Done: U.S. Waist

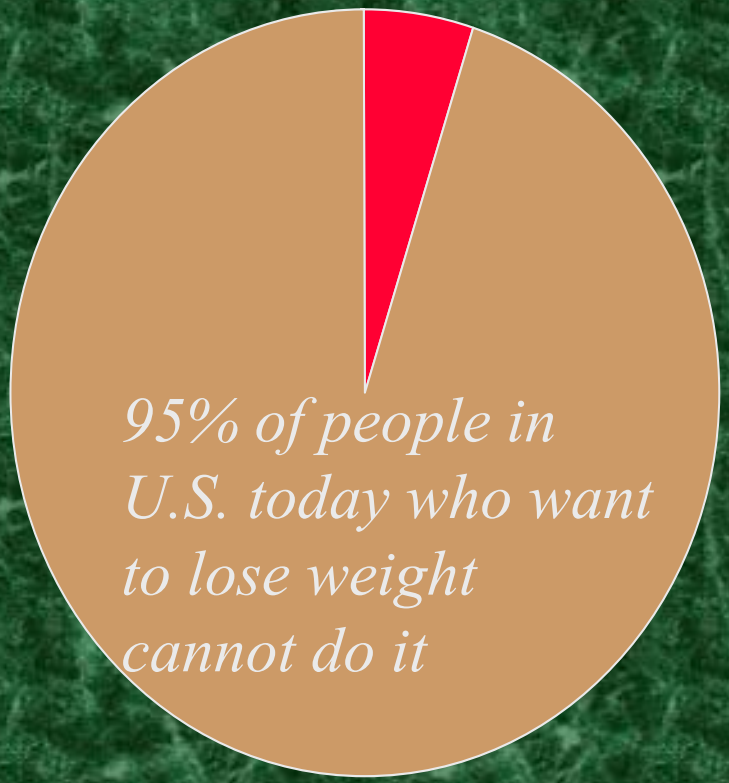
- physical activity is down over last 30 years by an estimated 25-30%
- time spent preparing food down about 40%
- calories consumed are up 15-20%

Let's Do the Math

1973:	**2003:**	**2003:**
calories to maintain weight	decrease activity by 25-30%	increase eating by ~ 300 calories per day
2000 calories	1500 calories to maintain weight	2300 calories -1500 calories 800 extra calories per day

National Weight Control Registry

- Tracking successful losers:
  - Lose 20 pounds or more
  - Keep it off for 2 years
- What's the success rate?



5 %

success rate

NEW DEFINITION OF SUCCESS

"A greater appreciation of the biological factors that regulate body weight and the difficulty of maintaining large weight losses prompted a number of expert panels to conclude that weight losses of only 5 to 15% initial weight are a successful outcome."

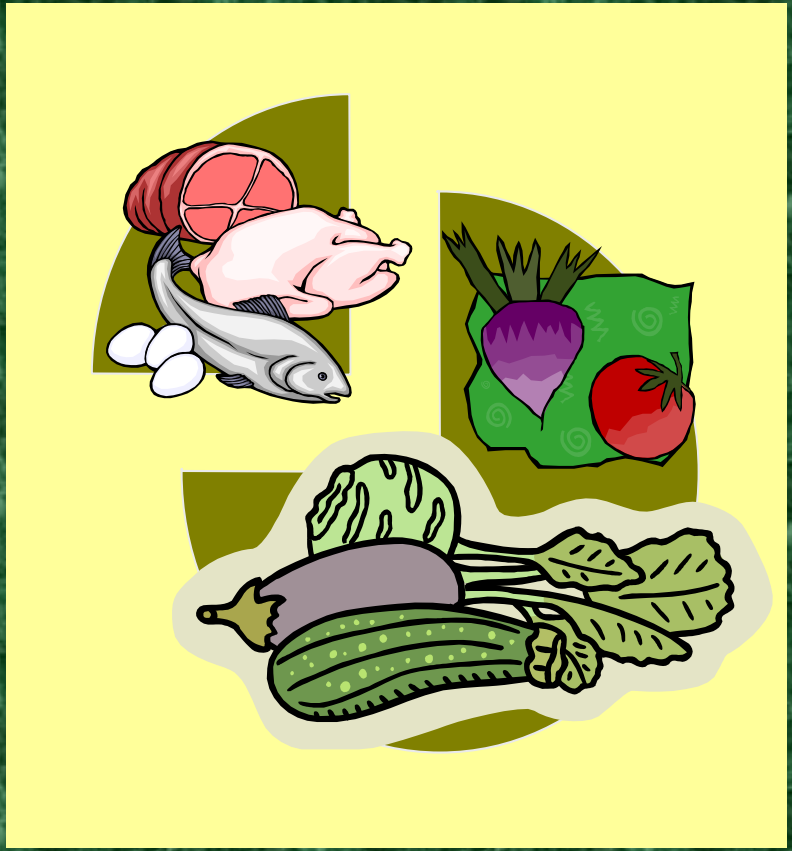
-USDA 1995

-Institute of Medicine 1995

-NIH/NHLBI 1998

A Plate for a Healthy Weight

- most of the plate (3/4) should be salad or non-starchy vegetables and fruits
- about ¼ of the plate should be lean protein
- flavor for satiety with olive oil, cheese, nuts



National Weight Control Registry

- Keep trying, don’t give up.
- Don’t deny yourself.
- Weigh yourself often.
- Exercise 1 hour per day.
- Have an active day.
- Eat low-fat, moderate carbohydrate, lean protein foods.
- Eat 5 small meals a day.

Jim Hill, University of Colorado

Why We Should Do It

- estimated annual U.S. obesity cost: $117 billion
- 1/3 of today's kids predicted to develop type 2 diabetes: 3X current prevalence
- overweight & obesity disproportionally affect people living in poverty
- we are the fattest nation on earth

How We Should Do It

It is the position of the American Dietetic Association that all foods can fit into a healthful eating style.

If consumed in moderation, appropriate serving size and combined with regular physical activity, all foods can fit into a healthy diet.

R.D.s call this a "total diet approach".

ADA, January 2002

Constant Craving

- Weight control research suggests that we are not good at resisting temptation.
- Unsatisfied cravings likely result in greater total calorie consumption.

What Works

- individualized plans
- portion control
- limiting fat and carbohydrate
- including lean protein & healthy fats
- active daily routine
- regular moderate exercise
- mastering the change process
- achieving a reshaped lifestyle

The Reality Is…

- cutting back on carbohydrates can help people get started on a weight management program
- after initial weight loss, to help ensure long-term success, strive for moderate fat and carbohydrate intake with lean protein
- becoming more active is an essential ingredient in any program to control weight

Food Products

- need convenient fruits & vegetables:
  - baby carrots in bag
  - grape tomatoes
  - bagged salads
  - cut fresh fruit
  - frozen meal kits
  - fast food options
  - restaurant menu items
- tasty & affordable

Food Eaten Out

- sandwich wraps
- entrée salads
- fruit/granola/yogurt parfaits
- cut fresh fruit
- vegetable salads
- healthy, happy meals

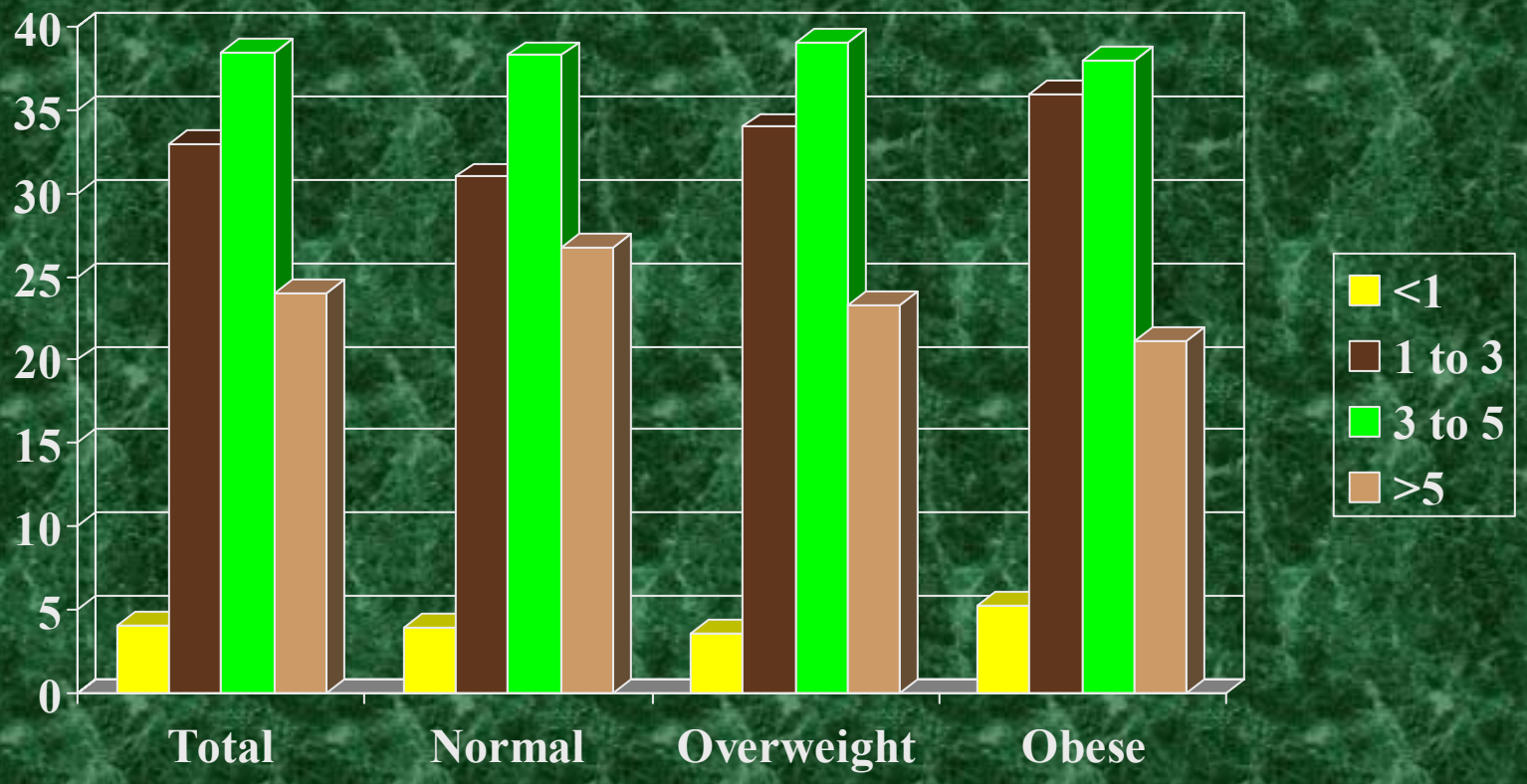
Create a New Plate

- Plenty of leafy greens & juicy fruits & vegetables
- Ample amounts of lean protein & dairy
- Dairy foods – 3 to 4 servings per day
- Healthy, satisfying fats
- Controlled carbohydrates

Create a New Weight

- Leadership at local and national levels: policy & environmental incentives ($$$)
- Partnerships of food and activity for consumers: help people reshape their lifestyle & body

Food Partnerships: 5-A-Day



BRFSS CDC 2000

Global Obesity & Overweight

- current population of Earth ~6 billion
- about 300 million obese
- estimated 750 million overweight
- affecting ~16% of global population

WHO Global Plan

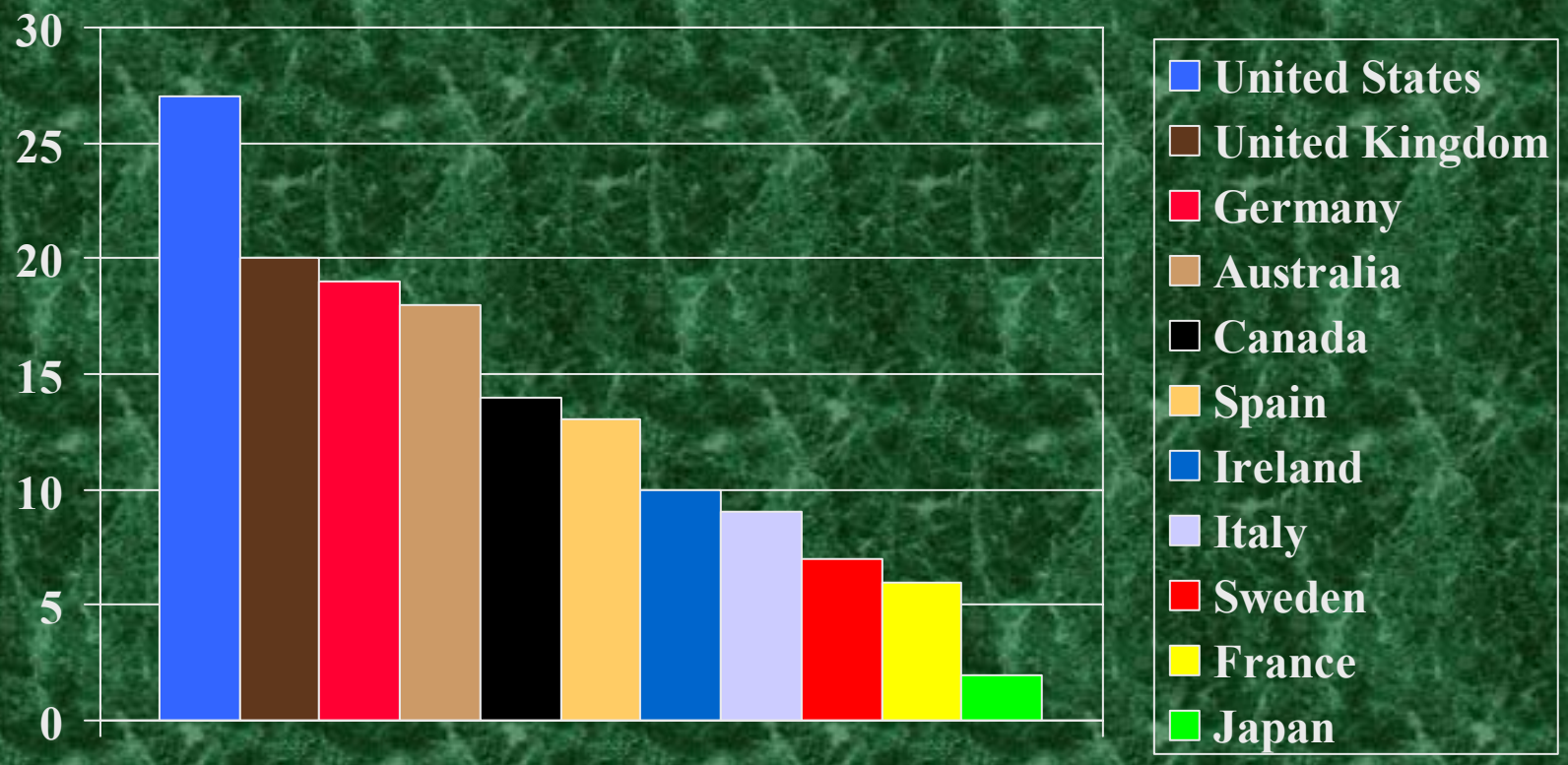
- describes how governments can promote healthy eating and activity behaviors
- discusses role of taxation and subsidies toward healthy food production
- limit levels of saturated fat, *trans* fat, sugar and salt
- more responsible marketing practices, particularly with products aimed at children

WHO April 19, 2004
www.who.int/hpr

Food Labels

- *trans* fats are a growing consumer concern
- need consumer education about portions per container and calories per serving

Government Leadership



OECD Health Statistics 2000

Government Strategy

- policies to promote weight control need to be aligned among federal agencies:
  - USDA
  - HHS
  - CDC
  - FDA
  - NIH

Halting the Obesity Epidemic:
A Public Health Policy Approach

Marion Nestle & Michael Jacobson,
Public Health Reports, Jan/Feb, 2000

- **National Leadership is Needed:**
  - health officials, researchers, educators
  - legislators, policy makers
  - transportation experts, urban planners
  - business, industry, non-profit organizations
  - civic, consumer groups

Obesity: Responding to the Global Epidemic

Tom Wadden, Kelly Brownell, Gary Foster. Journal of Counseling & Clinical Psychology, vol. 70 (3), 2002

- **Policy as Means for Prevention:**
  - regulate food ads aimed at children
  - prohibit fast food & soft drinks in schools
  - subsidize sale of healthy foods
  - tax unhealthy foods
  - provide resources for physical activity

Obesity & the Environment: Where Do We Go from Here?

Jim Hill, Holly Wyatt, George Reed, John Peters

Science, Feb 7, 2003

Building for Social Change:

1. political, social, economic incentives to create an environment supportive of healthy lifestyle choices
2. help individuals manage better in the current environment – because #1 will take some time

Breaking Bread

"If we've learned anything over the past several decades of fighting the battle of the bulge, it's that short-term diets are not substitute for what should be lifelong changes in your habits."

- *you have to move, hard enough to break a sweat at least 30 minutes most days of the week*
- *you have to eat those fruits & vegetables – 5 to 9 servings the size of your fist every day*
- *and while you're at it, it doesn't hurt to simplify your life and strengthen your bonds with family and friends*

Time – Sanjay Gupta, 2003