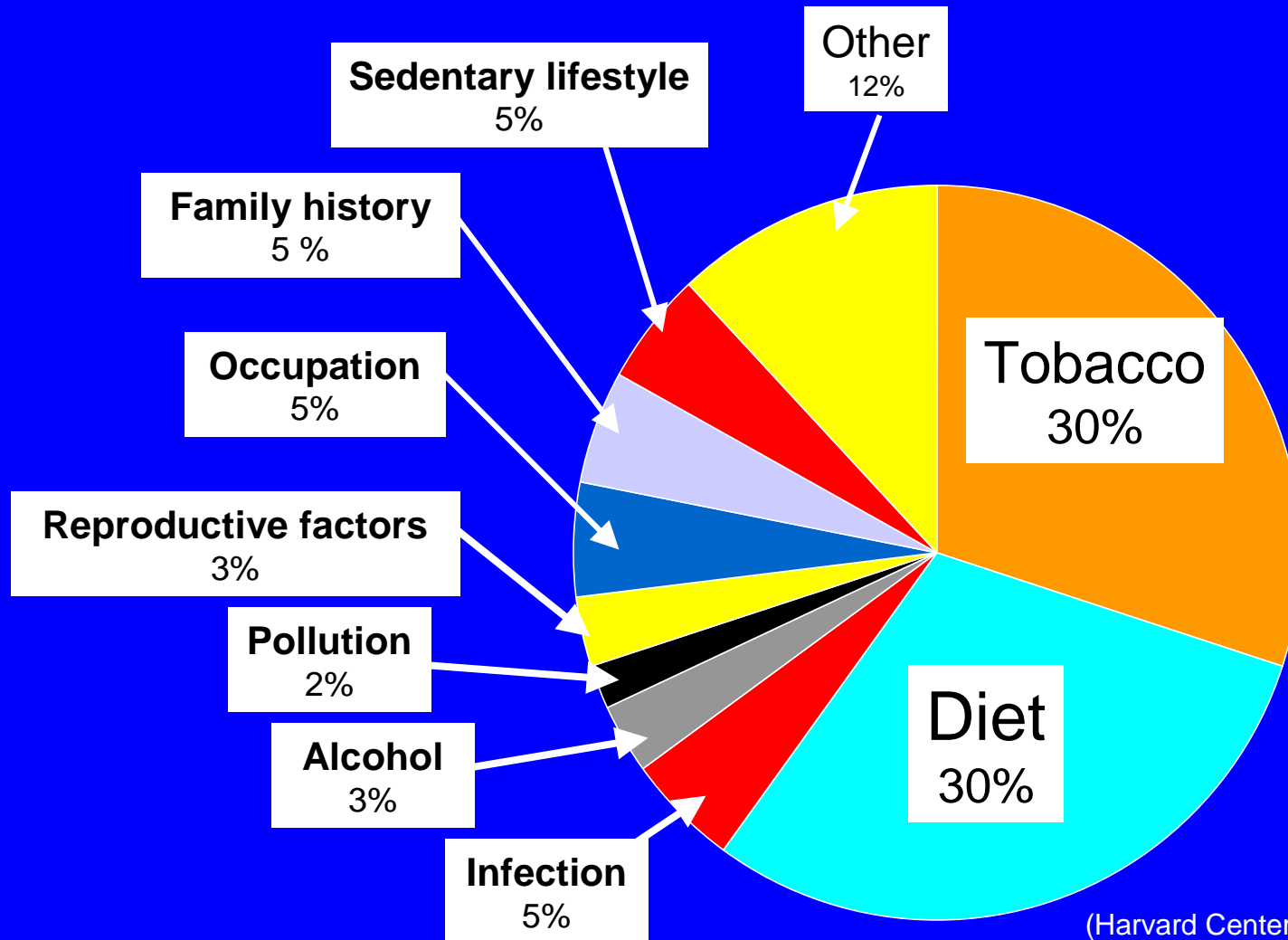


Nutrition and Cancer Prevention

Elisa V. Bandera, MD, PhD



The Causes of Cancer in the US.



(Harvard Center for Cancer Prevention)

Guidelines for Cancer Prevention

- Maintain a healthy weight
- Get at least 30 minutes of physical activity every day
- Don't smoke
- Eat a healthy diet
- Drink less than one alcoholic drink a day
- Protect yourself from the sun
- Protect yourself and your partner(s) from sexually transmitted infections.

More than two thirds of the causes of cancer are preventable

- Smoking
- Diet
- Alcohol
- Obesity
- Physical inactivity



American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention, 2001

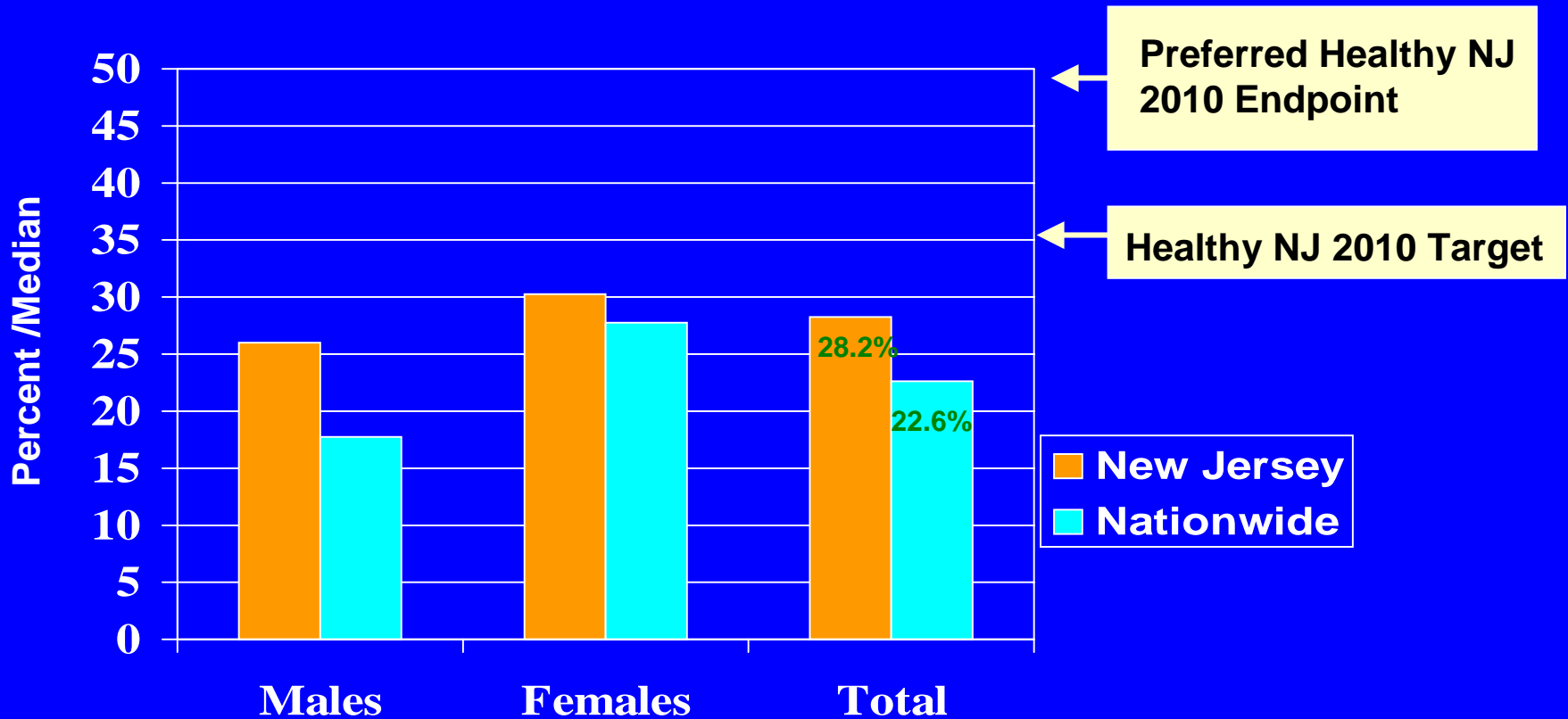
- Eat a variety of healthful foods, with an emphasis on plant sources.
 - Eat five or more servings of a variety vegetables and fruits each day.
 - Choose whole grains in preference to processed (refined) grains and sugars.
 - Limit your consumption of red meats, especially those high in fat and processed.
 - Choose foods that maintain a healthful weight.
- Adopt a physically active lifestyle.
- Maintain a healthful weight throughout your life.
- If you drink alcoholic beverages, limit consumption.

(Byers et al., CA Cancer J Clin, 2002)

Healthy NJ 2010- Nutrition Goals

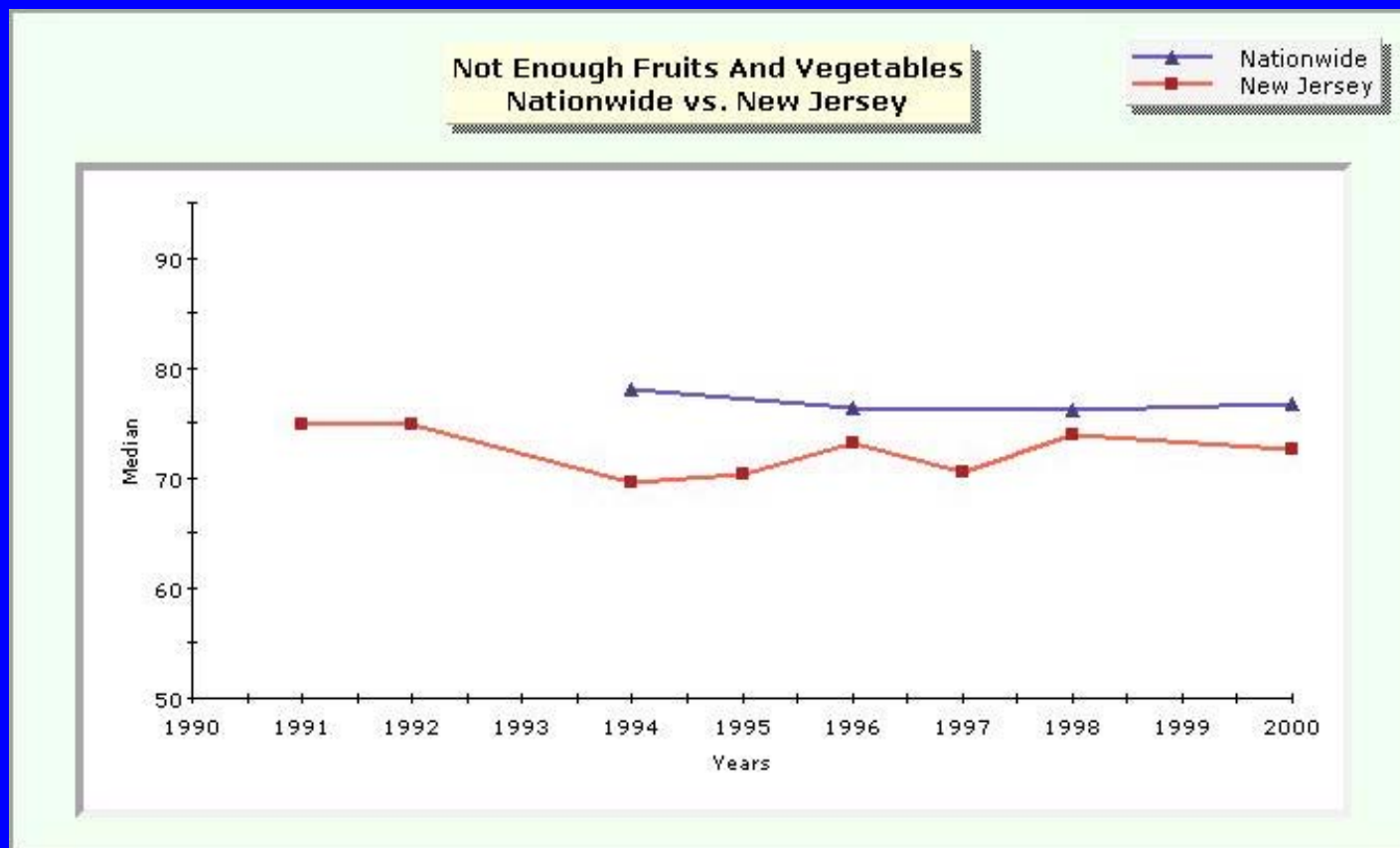
- To increase the percentage of persons aged 18 and over eating at least five daily servings of **fruits and vegetables** (including legumes) to 35%.
- To reduce the percentage of persons aged 18 and over who are **overweight** but not obese to 27.6% for all adults.
- To reduce the percentage of persons aged 18 and over who are **obese** to 12% of all adults.
- Increase the percentage of persons aged 18 and over who participate in frequent, leisure time **physical activity** during the past month to 42.5%.

Fruit and vegetable consumption 5+ times a day New Jersey vs. nationwide – BRFSS, 2002



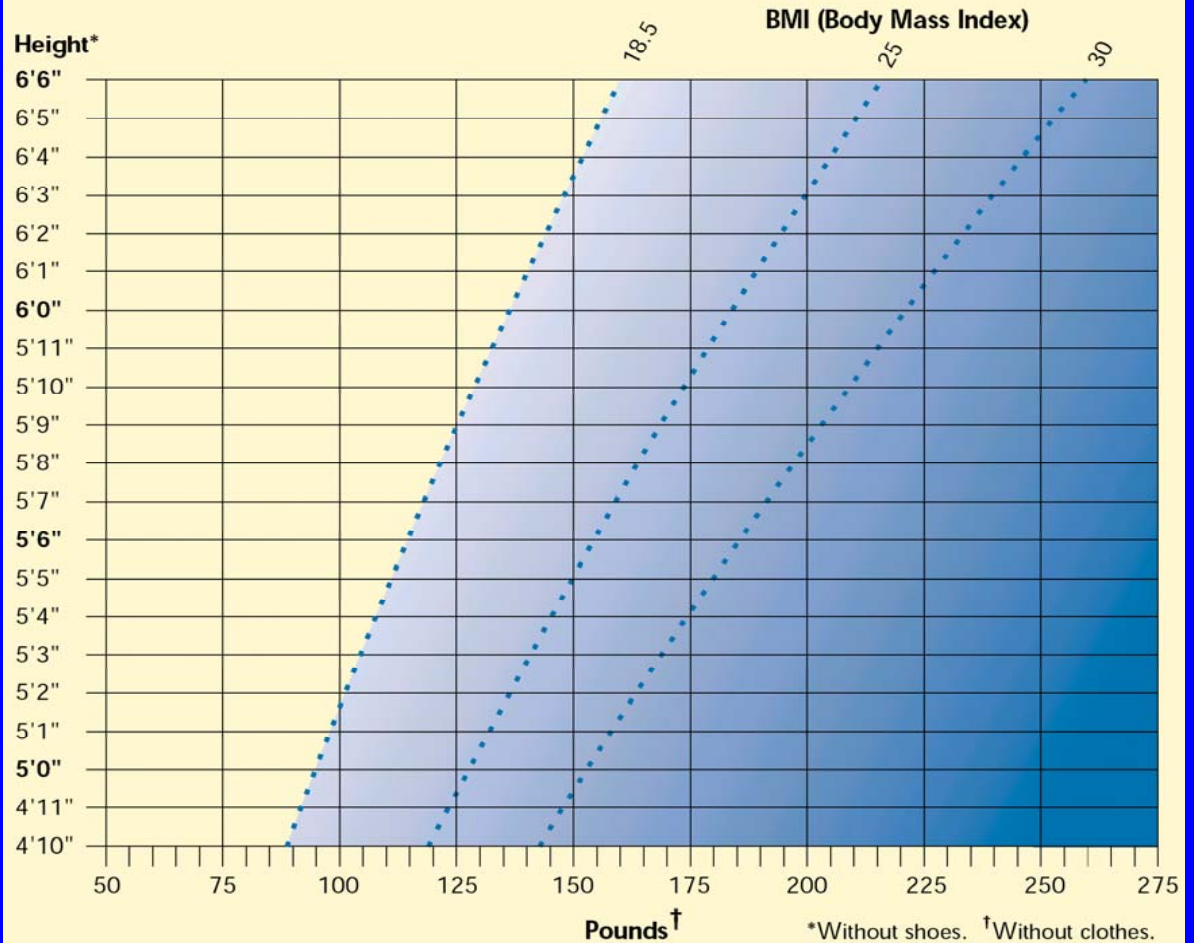
(CDC- Behavioral Risk Factor Surveillance System, 2002)

Consumption of fruits and vegetables* in New Jersey and nationwide. Behavioral Risk Factor Surveillance System, 1990-2000.



*% of respondents 18 and older who report they are not consuming five or more servings of fruits and vegetables a day.

Are you
in the
“healthy
weight”
area?



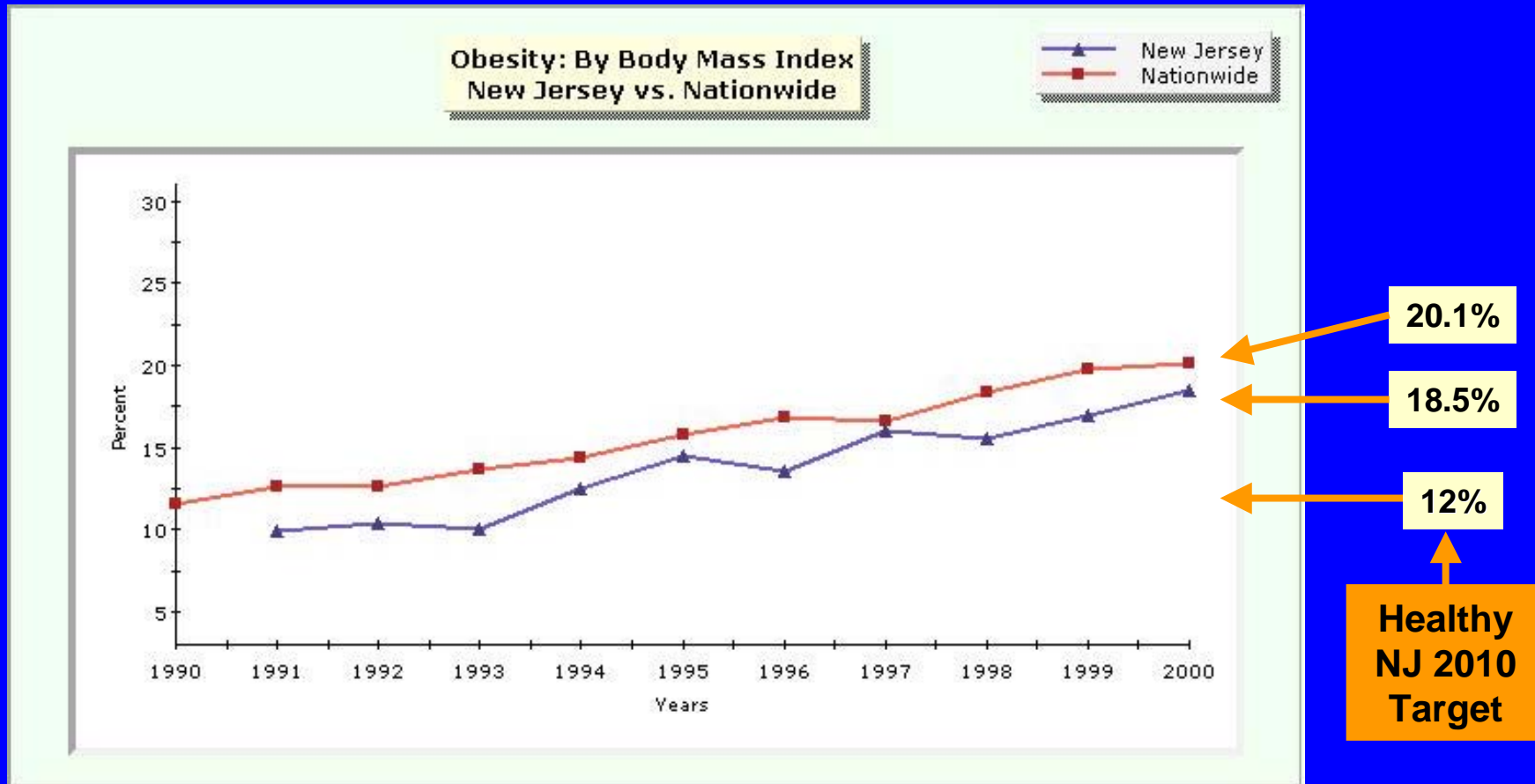
BMI measures weight in relation to height. The BMI ranges shown above are for adults. They are not exact ranges of healthy and unhealthy weights. However, they show that health risk increases at higher levels of overweight and obesity. Even within the healthy BMI range, weight gains can carry health risks for adults.

Directions: Find your weight on the bottom of the graph. Go straight up from that point until you come to the line that matches your height. Then look to find your weight group.

- Healthy Weight** BMI from 18.5 up to 25 refers to healthy weight.
- Overweight** BMI from 25 up to 30 refers to overweight.
- Obese** BMI 30 or higher refers to obesity. Obese persons are also overweight.

Source: Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2000, page 3.

Obesity trends in New Jersey and nationwide. Behavioral Risk Factor Surveillance System, 1990-2000.

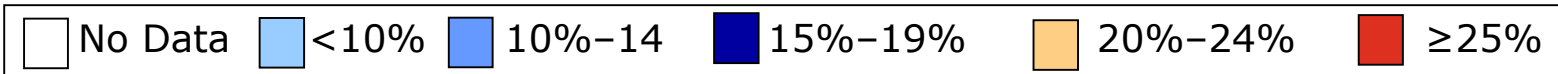
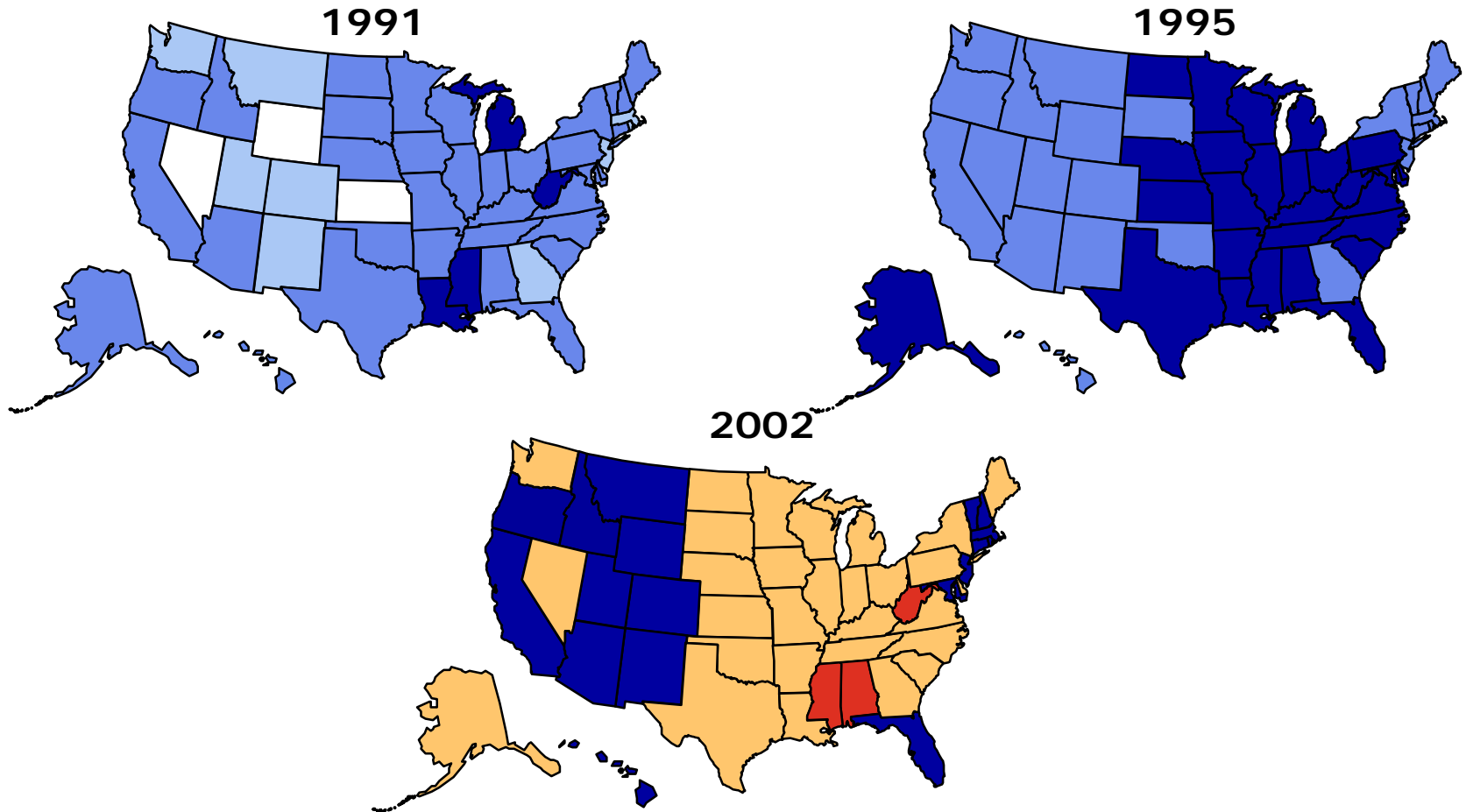


*All respondents 18 and older who report that their Body Mass Index (BMI) is 30.0 or more. BMI is defined as weight in kilograms divided by height in meters squared (w/h^{**2}).

Obesity Trends* Among U.S. Adults

BRFSS, 1991-2002

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



Nutrition and Physical Activity Goals

NJ Comprehensive Cancer Control Plan

- To promote long-term healthy eating patterns, healthy weight, and physical activity for cancer prevention among New Jersey residents.
- To increase research on effective dietary and physical activity approaches for the prevention of cancer and increasing survivorship of cancer patients.
- To assure proper nutritional care for cancer patients.

WCRF/AICR Report, 1997

Conclusions

“Between 30% and 40% of all cases of cancer are preventable by feasible and appropriate diets and by physical activity and maintenance of appropriate body weight.”

WCRF/AICR Report, 1997

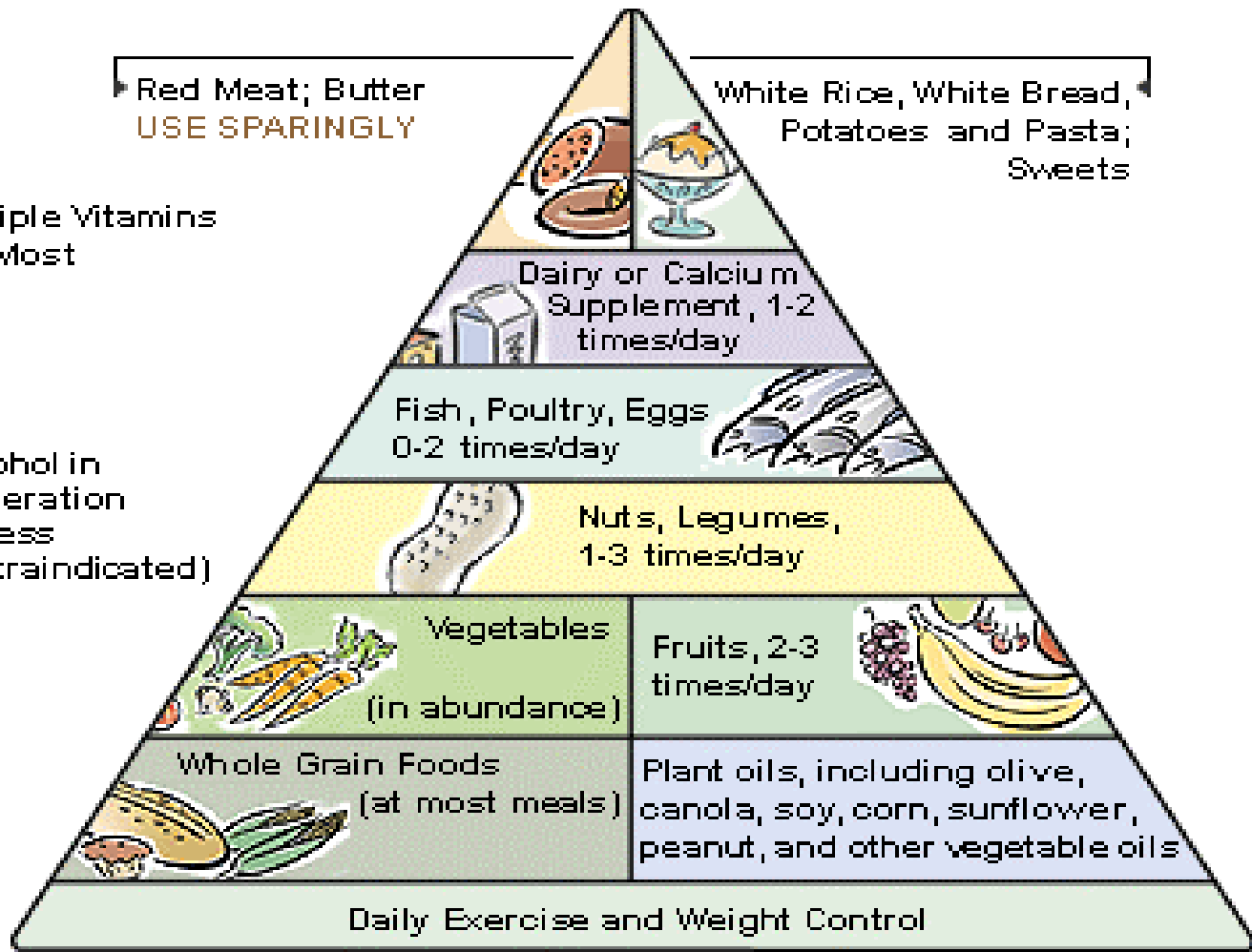
Conclusions

“Diets containing substantial and varied amount of vegetable and fruits will prevent 20% or more of all cases of cancer.”

WCRF/AICR Report, 1997

Conclusions

“Keeping alcohol intake within the recommended limits will prevent up to 20% of cases of cancers of the aerodigestive tract, the colon and rectum, and breast.”



Multiple Vitamins for Most



Alcohol in Moderation (unless contraindicated)

Healthy Eating Pyramid

"Let food be thy medicine..."

- Hippocrates circa 431 B.C.

...choose wisely

