Health At Every Size℠: A New Weight Paradigm

Society for Nutrition Education

Weight Realities Division

Updated 2010

Feel free to use this PowerPoint to explain the elements of a *Health At Every Size℠* (HAES℠) approach to health promotion with students, health professionals, and others. Please do not integrate contrary or rebuttal information into this PowerPoint for the purpose of discouraging adoption of this approach. If contrary or rebuttal information is to be presented, present it separately and apart from this PowerPoint presentation.

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Critical Need for HAES Now!

- Increasing rates of overweight and obesity
- Well-established failure of traditional weight loss approaches
- Physical and psychological damage from traditional approaches
- Health improvements NOT dependent on weight loss

“Do No Harm”

- Ethically, health care professionals seek treatments that:
  - Encourage autonomy
  - Help, not harm
  - Do not discriminate
- For successful treatment, must shift the traditional weight paradigm

Failure of the Traditional Weight Paradigm

If the goal is to help people improve HEALTH, what has the research shown?

Shift the Traditional Paradigm

- **OLD:** Losing weight is the only way to be healthy.

- **NEW:** Many factors define health. Overweight people can improve fitness and health through lifestyle changes, whether or not they lose weight.

Metabolic Fitness Defined

- "The absence of biochemical risk factors associated with obesity, such as elevated fasting concentrations of cholesterol, triglycerides, glucose, or insulin; impaired glucose tolerance or elevated blood pressure" (p. 1383)
  - Reductions in risk factors are not dependent on weight loss!

Campfield et al. *Science*. 1998.280:1383-1387.

Metabolic Fitness (cont.)

- "There is now considerable evidence that there are individuals who are obese and who, nevertheless, are metabolically normal." (p. 1503)

Sims. *Metabolism*. 2001;50:1499-1504.

BMI, Fitness, and Mortality

- Mortality rates are lower for fit men than unfit men at any BMI category

Barlow et al. *Int J Obes*. 1995;19(Suppl 4):S41-S44.

- Cardiorespiratory fitness is a better predictor of mortality in women than BMI

Farrell et al. *Obes Res*. 2002;10:417-423.

Cardiovascular Risk Among US adults NHANES 1999-2004

- There is a high prevalence of clustering of cardiometabolic abnormalities among normal-weight individuals, and a high prevalence of overweight and obese individuals who are metabolically healthy. Further study into the physiologic mechanisms underlying these different phenotypes and their impact on health is needed.

Wildman et al. Arch Intern Med. 2008;168(15):1617-1624

Cardiovascular Risk Among US adults
NHANES 1999-2004

- 51.3% of overweight adults (35.9 million adults) were metabolically healthy
- So were 31.7% of obese adults
- 23.5% of normal weight adults were metabolically abnormal

Wildman et al. Arch Intern Med. 2008;168(15):1617-1624

Dietary Approaches to Stop Hypertension (DASH)

- Evaluation of a dietary intervention to decrease blood pressure

  Appel et al. *N Engl J Med.* 1997;336:1117-1124.

- 459 adults/8 week intervention
  - Increased fruits and vegetables
  - Increased low-fat dairy products
  - Reduced saturated and total fat
  - NO WEIGHT CHANGE

DASH (cont.)

- Dietary intervention significantly lowered blood pressure
- Effects were independent of weight loss

Shift the Traditional Paradigm

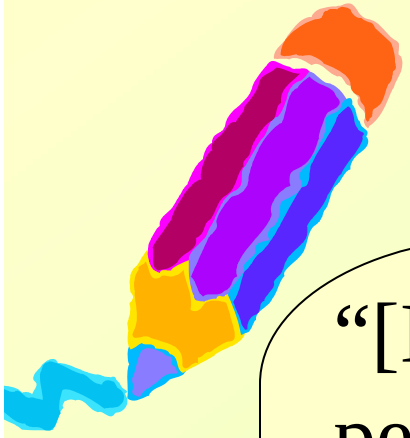
- **<u>OLD</u>:** Everyone can and should be thin.

- **<u>NEW</u>:** Genetics play a key role in body size and weight. Some bodies are not genetically programmed to be thin.

Role of Genetics

- "Over 100 years' worth of scientific research has demonstrated that heredity plays a major role in the development of body size and obesity." (p. 73)

Price. In Wadden and Stunkard (eds). *Handbook of Obesity Treatment.* The Guilford Press. 2002.



"[I have a relative who] looks like that pencil. She always…eats as much as I do, and is never bashful about it…. Yeah, her metabolism burns it off. Some of us, we gain five pounds by looking at a recipe."

Male, 40's to 50's

Wardlaw. *What men say about body image*. A New You Curriculum, 2004.

Role of Genetics (cont.)

- Over 600 genes, markers, & chromosome regions have been linked to obesity.
- Nutrition genomics (study of food-gene interaction) has already found applications in cancer, diabetes & heart disease.
- “Genetic factors influencing obesity are complex and multifaceted.” (p. 779)

Skelton, et al. *Ped Clinics No Am.* 2006;53:777-794.

"My mother was just like I am. I mean, she was real slim when she was married, and she got heavier. . . . A lot of my kids are built fat, like me."

Female, mid 70's

Holmes, Pelican, & Vanden Heede. *Let their voices be heard.* Discovery Assoc. Publishing House. 2005.

Role of Genetics (cont.)

- "The commonly held belief that obese individuals can ameliorate their condition by simply deciding to eat less and exercise more is at odds with compelling scientific evidence indicating that the propensity to obesity is, to a significant extent, genetically determined." (p. 563)

Friedman. *Nature Med*. 2004;10:563-569.

Shift the Traditional Paradigm

- **<u>OLD</u>:** Overweight people can lose weight and maintain that loss permanently.

- **<u>NEW</u>:** Most people who lose weight gain it back. Weight loss maintenance often means very restrictive diets and rigid exercise patterns.

Long-Term Weight Loss: Limited Success

- Meta-analysis of long-term weight loss maintenance in participants of structured programs

  Anderson et al. *Am J Clin Nutr*. 2001;74:579-584.

- 5-year outcomes:
  - Average weight loss maintained = 3.0 kg (23.4% of initial weight lost)
  - Average reduction in body weight = 3.2% of initial body weight

"I never liked my body…. Never been able to get it where I was happy with it, even when I was young…and in really good shape…. Always felt it was too big…. I started dieting when I weighed 250, and I dieted myself up to 350."

Male in his 60's

Wardlaw. *What men say about body image*. A New You Curriculum, 2004.

Can Anyone Successfully Control Their Weight?

- Study of successful weight loss and maintenance of 854 adults in a 3-year community-based program

  Crawford et al. *Int J Obes*. 2000;24:1107-1110.

- Outcomes:
  - 53.7% GAINED weight within first year
  - 24.5% avoided weight gain over 3 years
  - 4.6% lost and maintained weight loss at 3 years

Traditional Weight Loss Interventions

- Review of traditional dietary and exercise interventions

  Miller. *Med Sci Sport Exerc*. 1999:31:1129-1134.

- Long-term data suggest almost complete relapse after 3-5 years

Shift the Traditional Paradigm

- **OLD:** Weight regain is due to backsliding.
- **NEW:** Weight regain is most likely due to the biologic system regulating body weight.

Battle Against Biology

- "In trying to lose weight, the obese are fighting a difficult battle. It is a battle against biology, a battle that only the intrepid take on and one in which only a few prevail." (p. 857)

Friedman. *Science*. 2003;299:856-858.

Concerns about Dieting

Dieting is Prevalent in the U.S.

- Percent of adults trying to lose weight according to Behavioral Risk Factor Surveillance System data for 2000:
  - 46% of women
  - 33% of men

Bish et al. *Obes Res*. 2005;13:596-607.

Dieting doesn't work

- "The potential benefits of dieting on long-term weight outcomes are minimal. The benefits of dieting are simply too small and the potential harms of dieting too large for it to be recommended as a safe and effective treatment for obesity." (p. 230)

Mann, et al. *Amer Psych*. 2007;62:220-233.

Weight Loss Methods

- Diets
- Exercise
- Behavior modification
- Prescription drugs
- Diet pills
- Herbal supplements
- Fasting
- Purging
- Smoking
- Liposuction
- Gastric surgery
- Hypnosis
- Acupuncture
- Body wraps
- Lotions/creams
- Others…

Why the Need for a New Approach?

- Diets rarely achieve permanent weight loss.
- Lifestyle changes are associated with improved metabolic fitness regardless of weight loss.
- There are health risks associated with food restriction, weight loss, chronic dieting, and compulsive exercise.

Risks of Weight Loss

- "…there is a dark side to this national preoccupation [with losing weight]…vast amounts of money…are wasted…failed attempts to lose weight often bring with them guilt and self-hatred…the cure for obesity may be worse than the condition."

Kassirer and Angell. Losing weight – an ill-fated new year's resolution. *N Engl J Med*. 1998;338:52-54.

Risks of Weight Loss

- "Obesity has health risks. But the quest for weight loss is also a risky venture, and those risks include injury and death from dieting, weight loss, and attempted weight loss."

Berg. *Health Risks of Weight Loss*, 3rd Ed. 1995.

Health Risks of Food Restriction and Weight Loss

- Inadequate nutrient intake
- Anemia
- Headache
- Fatigue/weakness
- Cold intolerance
- Muscle cramps
- Amenorrhea
- Cardiac arrhythmias
- Gallstones
- High cholesterol
- Decreased sex drive
- Nausea
- Diarrhea or constipation
- Death

Psychological Risks of Chronic Dieting

- Preoccupation with food, eating, & weight
- Increased response to external vs. internal eating cues
- Mood swings
- Irritability
- Poor self-image
- Disordered eating
- Apathy/lethargy
- Narcissism
- Guilt
- Depression

Consequences of Restricting Food Intake

- Ignore/distrust hunger and satiety
- Rely on external cues
- Develop perfectionist tendencies
  - On/off diet
  - Judge foods as good/bad
- Tendency to binge

"I was one of those who went on every diet and they didn't work. . . . I tried this and that and the other. I'd lose weight, but then I'd gain 10 pounds more than I was."

Female, mid 60's

Holmes, Pelican, & Vanden Heede. *Let their voices be heard.* Discovery Assoc. Publishing House. 2005.

Social Implications of Overweight/Obesity

Weight Stigmatization

- Focus groups report weight stigmatization experienced in many life settings:
  - At home among family members
  - In social settings among friends or strangers
  - In work settings
  - In interactions with healthcare and service providers

Cossrow et al. *J Nutr Educ Behav*. 2001;33:208-214.

Harmful Effects of Weight Bias

Research has documented evidence of negative stereotypes, prejudice, and discrimination toward obese individuals in areas of employment, education, health care, the media, and interpersonal relationships. This stigmatization is pervasive and harmful, with serious consequences for psychological and physical health.

Puhl and Latner. *Obesity*. 2008; S16:51-52.

"I always claim that when you become heavy you become invisible. . . . It's not sociably accepted to hang out with people that are . . . obese."

Male in his 40's

Wardlaw. *What men say about body image*. A New You Curriculum, 2004.

Bias, Discrimination, and Obesity

- Documented bias and discrimination against obese persons in 3 areas of living:
  - Employment
  - Education
  - Healthcare

Puhl and Brownell. *Obes Res*. 2001;9:788-805.

Attitudes of Health Professionals

- Attendees at an international obesity conference demonstrated significant pro-thin, anti-fat bias
- Stereotyped obese persons as lazy, stupid, and worthless

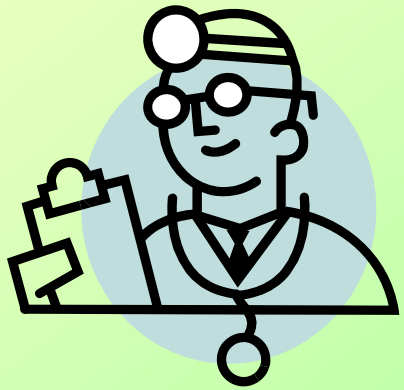
Schwartz et al. *Obes Res.* 2003;11:1033-1039.

"Medical professionals can be so insensitive to a person with weight problems. It's like they are saying, 'Why don't you just diet? Why don't you have any self-control?' . . . He wrote 'obesity' in my chart even though I'd lost 40 pounds. [She starts to cry.] These aren't tears of sadness, they're tears of anger. I got a different doctor."

Female, early 40's

Pelican et al. WIN the Rockies research. *Fam Cons Sci Res J*, 2005; 34(1):56-79.

Attitudes of Primary Care Physicians



- More than half of a sample of primary care physicians viewed obese patients as awkward, unattractive, ugly, and noncompliant

Foster et al. *Obes Res*. 2003;11:1168-1177.

Need to Turn the Traditional Question Around…

- **NOT:** How can we help overweight or obese people lose weight?

- **INSTEAD:** How can we help all people be HEALTHY?

"I've been fighting obesity all my life. My image of myself is not a positive one. The doctor has told me I am probably not going to be a size 10 due to my frame size. I have accepted this and am not striving for this particular goal. I need to realize that I have many good qualities and have a lot to offer and people need to accept me for who I am and not what I am."

Female participant

Wardlaw, *Comments from Participants*, A New You Curriculum, 2004.

Health At Every Size℠ (HAES℠)

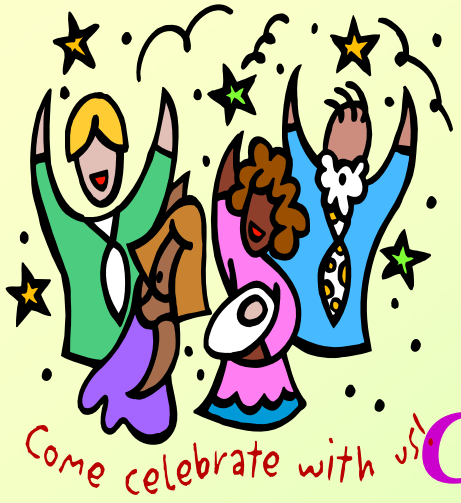
Basic Tenets

Ikeda. University of California-Berkeley Cooperative Extension, 1995.

HAES: Basic Premise

- Personal responsibility for choosing BEHAVIORS associated with health
- Improve nutritional quality of the diet and increase daily physical activity
- Focus on healthy behaviors - weight may or may not change

Assess improvements in metabolic fitness and decreased risk of chronic disease



HAES: Basic Tenets

Celebrate size diversity.

People come in a variety of shapes and sizes - a positive characteristic of the human race.

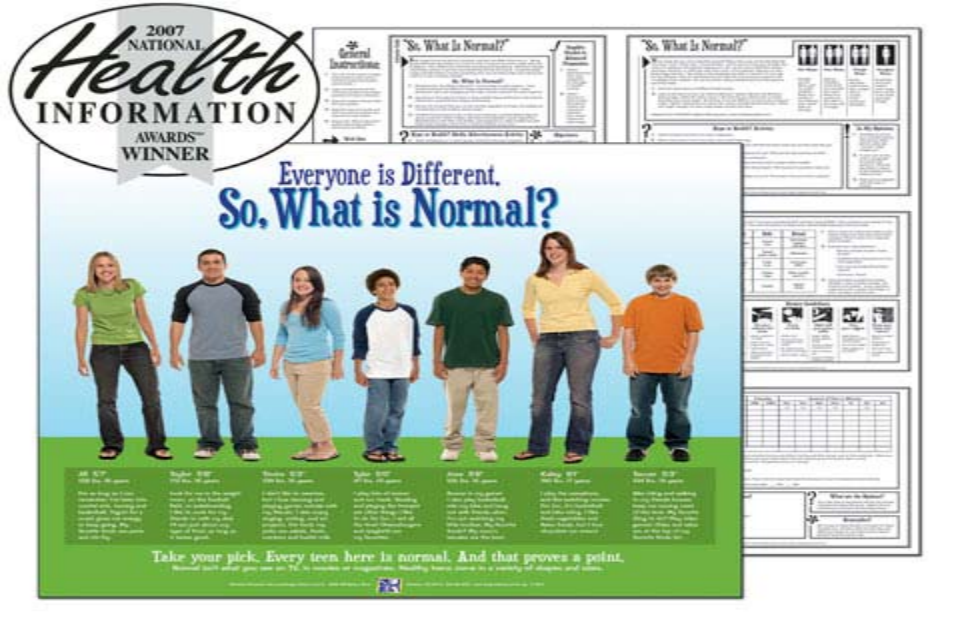
HAES: Basic Tenets

There is no "ideal" body.

There is no one ideal body size, shape, or weight that every individual should strive to achieve.

HAES: Basic Tenets

Every body is a good body, whatever its size or shape.



HAES: Basic Tenets

Self-esteem and body image are strongly linked.

By feeling good about their bodies and who they are, people are motivated to maintain healthy behaviors.

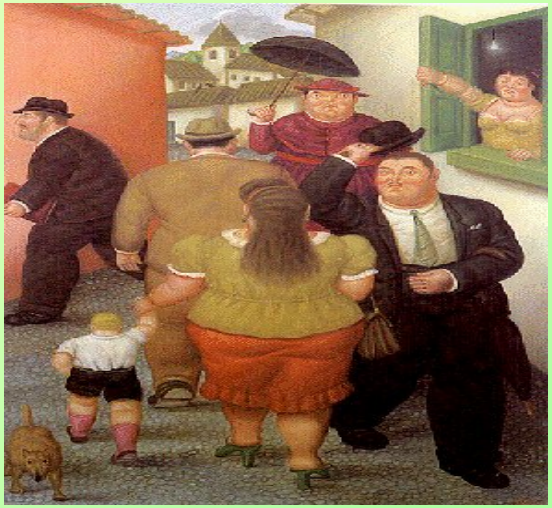
HAES: Basic Tenets

Appearance stereotyping is unfair.

It is based on superficial factors over which a person has little or no control.

HAES: Basic Tenets

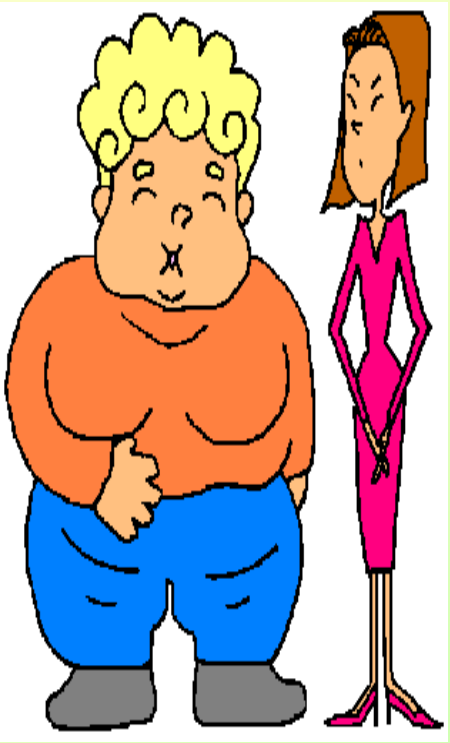
Respect the bodies of others, even though they might be quite different from your own.



HAES: Basic Tenets

Each person is responsible for taking care of his/her own body.

HAES: Basic Tenets



Good health is NOT defined by body size.

Good health is a state of physical, mental, and social well-being.

HAES: Basic Tenets

A healthy lifestyle can improve health, regardless of weight status.

People of all sizes and shapes can reduce risk of poor health by adopting a health-promoting lifestyle.

Focus on Lifestyle

- Eating behaviors:
  - Eat plenty of fruits & vegetables daily.
  - Enjoy whole grain foods.
  - Choose lean meats and/or protein sources.
  - Select low-fat dairy products.
  - Drink adequate fluids.
  - Keep portion sizes reasonable.
  - Pick healthful snacks.
  - Listen to hunger and satiety signals.

Focus on Lifestyle (cont.)

- Physical activity:
  - Accumulate at least 30 minutes of physical activity most days.
  - Enjoy different types of physical activity.
  - Involve family/friends in a physically active lifestyle.

To Weigh or Not to Weigh

There is a choice!

- Consider the consequences – if weighing is upsetting, skip it.
- Frequent weighing gives inaccurate picture of weight trends.

Alternate Measures of Success

- Physical, mental, and social well-being:
  - Healthful eating
  - Adequate physical activity
  - High energy level
  - Better mobility
  - Increased self-esteem and positive body image
  - Improved metabolic fitness and/or medical conditions

Assessing Health Status

- Blood pressure
- Blood glucose & insulin
- Glucose tolerance
- Insulin sensitivity
- Blood lipid levels
  - Total cholesterol, triglycerides, LDL- and HDL-cholesterol
- Bone density
- Joint health

Outcomes of Program Based on HAES/Non-Diet Principles

Improved health without harm, dependency, or discrimination.

Evaluating a Non-Diet Intervention

- Comparison of non-diet wellness program to traditional diet program
- Randomized clinical trial with 6 month intervention
- Measures at baseline, 3 months, 6 months, and 1 year

Bacon et al. *Int J Obes*. 2002;26:854-865.

Non-Diet vs. Traditional Diet Intervention

Component	Diet	Non-Diet
Caloric restriction	Yes	No
Physical activity	Yes	Yes
Body/self acceptance	No	Yes
Internal cues (hunger/satiety)	No	Yes
Counselor facilitated	Yes	Yes

Selected Outcomes at One Year

Outcome	Diet	Non-Diet
Weight Change	-5.9 kg	-0.1 kg
Cholesterol	-33 mg/dl	-32 mg/dl
LDL-cholesterol	-12 mg/dl	-9 mg/dl
Triglycerides	-45 mg/dl	-41 mg/dl
Systolic BP	-8.2 mmHg	-4.5 mmHg
Dropout Rate	41%	8%

Conclusions at One Year

- Traditional diet approach resulted in weight loss at 1 year; non-diet approach did not
- Non-diet and traditional diet approaches produced similar improvements in metabolic fitness, psychological measures, and eating behaviors
- Non-diet approach had significantly lower attrition rate

Follow-up at Two Years

- Non-diet/HAES group:
  - Maintained weight throughout
  - Sustained improvement in metabolic health indicators, activity levels, eating behaviors, and psychological measures
- Traditional diet group:
  - Weight lost at one year was regained
  - Little sustained improvement

Bacon et al. *J Am Diet Assoc*. 2005;105:929-936.

Conclusions at Two Years

- Non-diet/HAES approach promotes long-term behavior change
  - Traditional diet approach does not
- Size acceptance, reduction in dieting behavior, and eating based on internal hunger/satiety cues results in improved health indicators

Healthier eating behaviors associated with HAES approach

And the participants did not gain weight

Compared to the control group…

- Obese women in the HAES intervention decreased their
  - Situational susceptibility to disinhibition (i.e. they were less likely to overeat when restrictions were removed)
  - Susceptibility to external hunger
- Both healthy eating behaviors were sustained over time

Provencher et al. *J. Am. Diet. Assoc.* 2009.109:1854-1861..

Review: HAES Paradigm for Obesity Treatment

- "Initial results of the HAES-based paradigm show some promise in offering a more realistic and long-term approach to weight and lifestyle." (p. 43)

Miller and Jacob. *Obes Rev*. 2001;2:37-45.

"I enjoy eating…. I like food…. But now it doesn't have to be where I'm miserable when I get done eating because I've had to clean up my plate…. I finally got this mindset that I feel better if I don't overeat."

Female in her 60's

Pelican & Vanden Heede. WIN the Rockies research, *UW Bulletin MP112.1*, 2005.

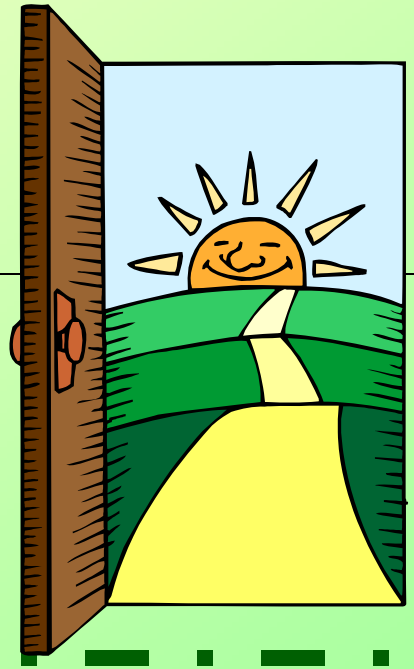
"I feel a lot healthier now. I have made peace with food. I am optimistic about pursuing exercise and eating without so much guilt. …Yes, I want a few inches off my waist but I will eat what I want, eat intuitively, exercise more and enjoy my life. Like an old car, my body runs well, it is comfortable and I will continue to fix it up and keep it shiny."

Female participant

Wardlaw, *Comments from Participants*, A New You Curriculum, 2004.

Final Message

The road to a fitter and healthier body is wide enough for everyone.



Weight Realities Division
Society for Nutrition Education

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