

# DASH DIET UNTUK HIPERTENSI DAN OBESITAS PADA REMAJA

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# Obesitas dan Hipertensi Remaja



Terapi  
Gizi

- Promotif
- Preventif
- Kuratif

Terapi  
Medis

- Kuratif

APA ITU

**DASH DIET ??**

# Based on National Institute of Health, DASH Diet is...

**D**

• Dietary

**A**

• Approaches to

**S**

• Stop

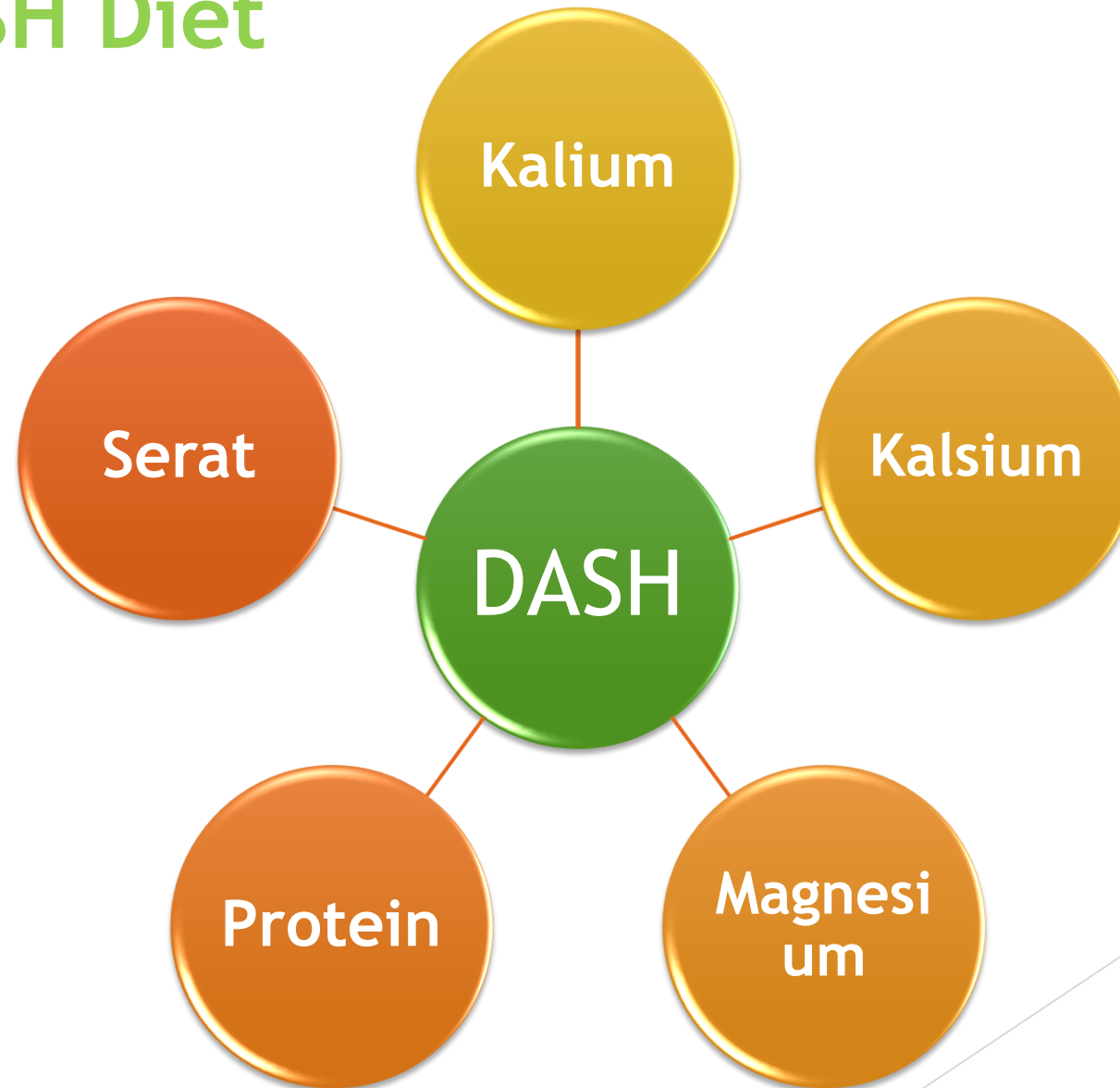
**H**

• Hypertension

# DASH Diet

- ▶ Style dari pengaturan makan
- ▶ Fokus kepada makanan bergizi yang dapat meningkatkan kesehatan dan menjaga tekanan darah, mencegah harus mengkonsumsi obat hipertensi ataupun mungkin dapat mengurangi dosis obat hipertensi

# PRINSIP DASH Diet



# The DASH Eating Plan

- ▶ **Meningkatkan asupan**
  - ▶ Sayuran
  - ▶ Buah
- ▶ **Konsumsi :**
  - ▶ susu yang rendah lemak
  - ▶ Daging yang rendah lemak
  - ▶ Kacang-kacangan
  - ▶ Whole grain
- ▶ Hindari makanan kemasan : tinggi Natrium
- ▶ Mengurangi asupan lemak jenuh, kolesterol, dan lemak
- ▶ Olahraga
- ▶ Menghindari merokok dan alkohol

# DASH diet

**6-8**

servings per day  
of whole grains

**4-5**

servings per day  
of vegetables

**4-5**

servings per day  
of fruits

**2-3**

servings per day of  
fat-free or low-fat dairy



**4-5**

servings per week of  
nuts, seeds, legumes

**6**

Less than  
servings per day of  
lean meat, poultry, fish

**5**

Less than  
servings per week  
of sweets

**2-3**

servings per day  
of fats and oils



Source: National Heart, Lung and Blood Institute

The DASH diet (Dietary Approaches to Stop Hypertension) has been shown to help lower blood pressure and prevent heart disease, stroke, diabetes and even some forms of cancer. It focuses on eating more fresh fruits and vegetables.

This is a guide to how much of each food group you should eat every day, based on eating 2,000 calories per day.

**UKHealthCare**  
Gill Heart Institute



Batasi gula,  
garam dan minyak

Gula

4 sendok makan

Garam

1 sendok teh

Minyak

5 sendok makan

2-4 porsi

+ minum air putih 8 gelas

3-4 porsi

2-3 porsi

3-4 porsi

mencuci tangan

memantau  
berat badan

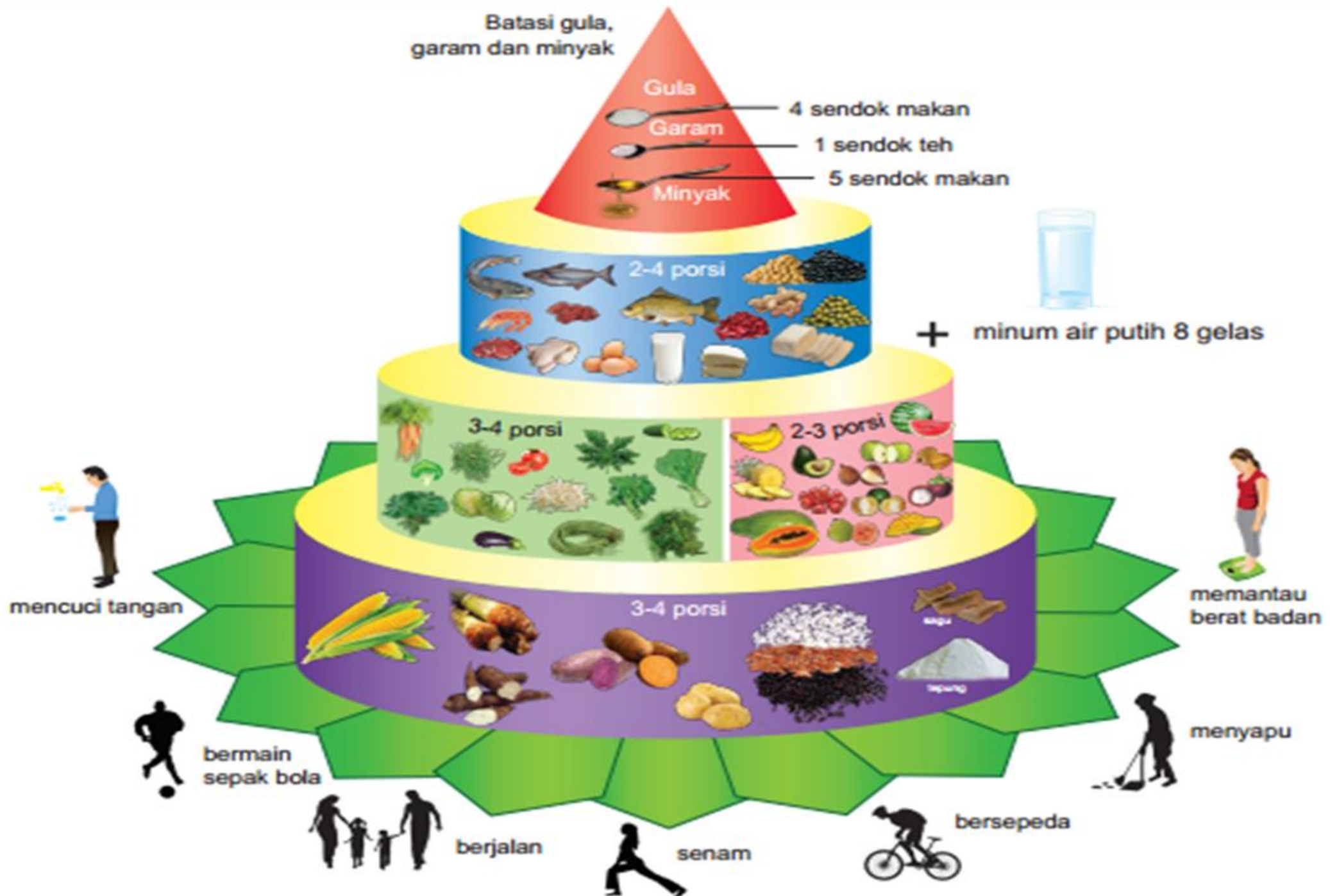
bermain  
sepak bola

menyapu

berjalan

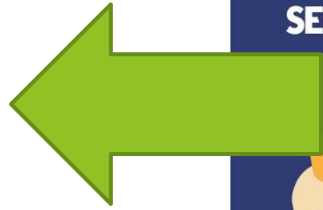
senam

bersepeda



# DASH DIET MEAL PLAN

- Penambahan 1 porsi sayuran dan 1 porsi buah per hari
- Banyak sayuran dan buah (tinggi kalium) → 4 - 5 porsi sehari
- 4 - 5 porsi kacang2an, biji2an → bahan makanan sumber magnesium, kalium dan serat



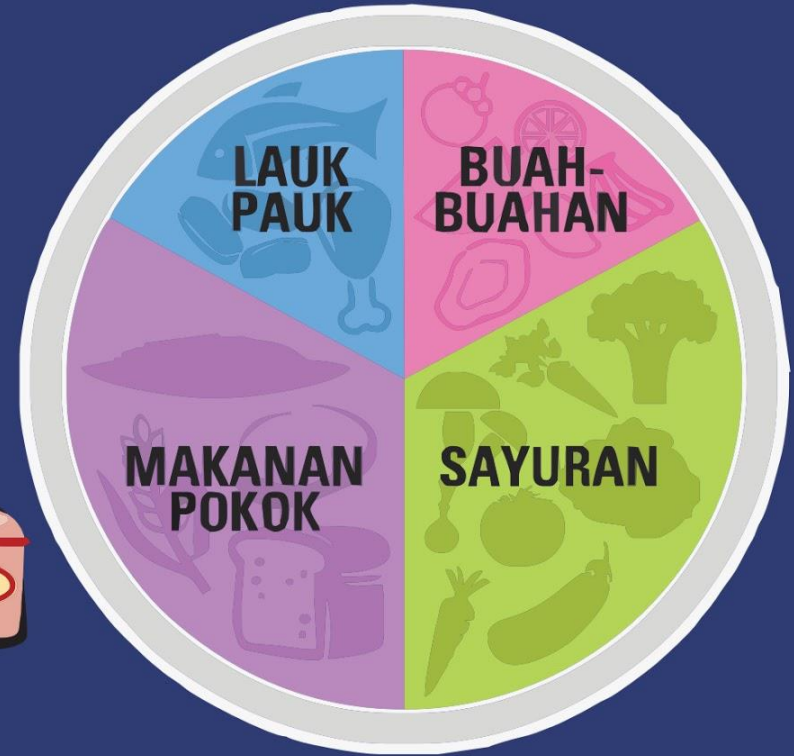
## Piring Makanku Sajian Sekali Makan



CUCITANGAN  
SEBELUMMAKAN



BATASIGULA,  
GARAMDAN  
MINYAK




AIR PUTIH

**1/2 Piring**  
Buah dan Sayur

**1/2 Piring Lagi**

**1/3** Lauk Pauk

**2/3** Makanan Pokok



# The Sample Meal Plan from National Heart Lung and Blood Institute (NHLBI)

# Following the DASH Eating Plan

Use this chart to help you plan your menus—or take it with you when you go to the store.

Food Group	Servings Per Day			Serving Sizes	Examples and Notes	Significance of Each Food Group to the DASH Eating Plan
	1,600 Calories	2,000 Calories	2,600 Calories			
Grains*	6	6–8	10–11	1 slice bread 1 oz dry cereal† 1/2 cup cooked rice, pasta, or cereal	Whole wheat bread and rolls, whole wheat pasta, English muffin, pita bread, bagel, cereals, grits, oatmeal, brown rice, unsalted pretzels and popcorn	Major sources of energy and fiber
Vegetables	3–4	4–5	5–6	1 cup raw leafy vegetable 1/2 cup cut-up raw or cooked vegetable 1/2 cup vegetable juice	Broccoli, carrots, collards, green beans, green peas, kale, lima beans, potatoes, spinach, squash, sweet potatoes, tomatoes	Rich sources of potassium, magnesium, and fiber
Fruits	4	4–5	5–6	1 medium fruit 1/4 cup dried fruit 1/2 cup fresh, frozen, or canned fruit 1/2 cup fruit juice	Apples, apricots, bananas, dates, grapes, oranges, grapefruit, grapefruit juice, mangoes, melons, peaches, pineapples, raisins, strawberries, tangerines	Important sources of potassium, magnesium, and fiber
Fat-free or low-fat milk and milk products	2–3	2–3	3	1 cup milk or yogurt 1 1/2 oz cheese	Fat-free (skim) or low-fat (1%) milk or buttermilk; fat-free, low-fat, or reduced-fat cheese; fat-free or low-fat regular or frozen yogurt	Major sources of calcium and protein
Lean meats, poultry, and fish	3–6	6 or less	6	1 oz cooked meats, poultry, or fish 1 egg‡	Select only lean; trim away visible fats; broil, roast, or poach; remove skin from poultry	Rich sources of protein and magnesium
Nuts, seeds, and legumes	3 per week	4–5 per week	1	1/3 cup or 1 1/2 oz nuts 2 Tbsp peanut butter 2 Tbsp or 1/2 oz seeds	Almonds, hazelnuts, mixed nuts, peanuts, walnuts, sunflower seeds, peanut butter, kidney beans, lentils, split peas	Rich sources of energy, magnesium, protein, and fiber



# Dash Diet

## Phase One – 14 days of Metabolism-Boosting menus

Day	Breakfast	Mid-morning Snack	Lunch	Mid-afternoon Snack	Before Dinner Snack	Dinner
1	Hard boiled egg 1-2 slices Canadian bacon 6 oz tomato juice	1 stick light cheese cherry tomatoes	Acapulco Tuna Salad (pg 210) baby carrots small side salad w/ Italian jell-o cup	4 oz light yogurt 18 cashews (1 oz)	pepper strips ¼ C guacamole (2oz)	Crispy Grilled Chicken (pg 200) 1 C mixed carrots, broccoli, cauliflower Side salad w/ Italian jell-o cup
2	Mini Egg Beaters omelet (note 1) 4-6 oz tomato juice	1 Laughing Cow light Cheese wedge 6 grape tomatoes	2-3 Turkey-Swiss roll- ups (note 2) ½ - 1 C coleslaw Raw snow peas or sugar snap peas jell-o cup	1 stick light cheese baby carrots	10 peanuts (20 peanuts)	Roasted sliced turkey Sautéed carrots and onions (note 3) Side salad w/ Italian jell-o cup
3	Scrambled eggs 1-2 slices Canadian bacon 4-6 oz diet cranberry juice	4 oz light yogurt 1 oz almonds	Cold fried chicken breast (note 4) Coleslaw Baby carrots jell-o cup	1 Laughing Cow light Cheese wedge 6 grape tomatoes	Pepper strips ¼ C guacamole (2oz)	Super-Savory Sliders (pg 188) 1 C broccoli side salad w/ balsamic dressing jell-o cup
4	Turkey Swiss roll up 4-6 oz tomato juice	2 T chunky peanut butter 8 baby carrots	Salad w/grilled chicken 20 walnuts (1 oz) jell-o cup	1 light cheese stick celery sticks	Pepper strips hummus	¼ rotisserie chicken 1 C frozen peas (micro cooked) Side salad w/ Italian jell-o cup
5	Mini Egg Beaters omelet (note 1) diet cranberry juice	1 Laughing Cow light Cheese wedge baby carrots	2-3 provolone cheese/ roast beef roll-ups Italian coleslaw (note 5) Sliced tomato jell-o cup	4 oz light yogurt 10 cashews	20 pistachios in shell	Garden Stendor: Sautéed chicken w/ tomatoes over Haricots Verts (pg 202) Caprese Salad (note 6) jell-o cup
6	Hard boiled egg(s) 1 slice Canadian bacon 4-6 oz tomato juice	1 Laughing Cow light Cheese wedge 6 grape tomatoes	Salmon Salad Sliced tomato Side Salad w/ Italian jell-o cup	4 oz light yogurt baby carrots	10 shelled peanuts (20 peanuts)	Stand-up Chicken (pg 205) Cauliflower Mashed potatoes (pg 214) Spinach Large Tossed Salad jell-o cup
7	Hard boiled egg(s) 10 cashews 4-6 oz tomato juice	light string cheese stick baby carrots	Grilled Chicken Salad jell-o cup	4 oz light yogurt 10 almonds	celery sticks guacamole	Hearty Veggie Chili (pg 186) w/ light shredded cheese and onions jell-o cup

## 4. MAGNESIUM

- ▶ Hipomagnesemia → banyak pada hipertensi  
→ membutuhkan dosis anti hipertensi lebih tinggi untuk mengontrol tensi
- ▶ Kebutuhan magnesium : 200-500 mg/hari
- ▶ Sumber : sayuran hijau, kacang2an, biji2an, susu, coklat dan teri

# PERANAN dari DASH DIET

Penurunan Berat  
Badan

Penurunan  
Tekanan Darah  
(normal,  
hipertensi)

Dengan Rendah  
Garam,  
menurunkan TD  
lebih besar

Penurunan  
Risiko Penyakit  
Jantung, Stroke,  
Kanker

Menurunkan  
kadar asam urat  
pada  
hiperurisemia (7)

Mencegah  
diabetes dan  
komplikasinya  
(8,9)

- ▶ the combination of low sodium intake and the DASH diet was associated with substantially greater reductions in SBP among participants with a higher SBP at baseline compared with the combination of high sodium intake and the control diet. These findings reaffirm the importance of lifestyle interventions among adults with uncontrolled SBP (Stephen *et al.*, 2017)



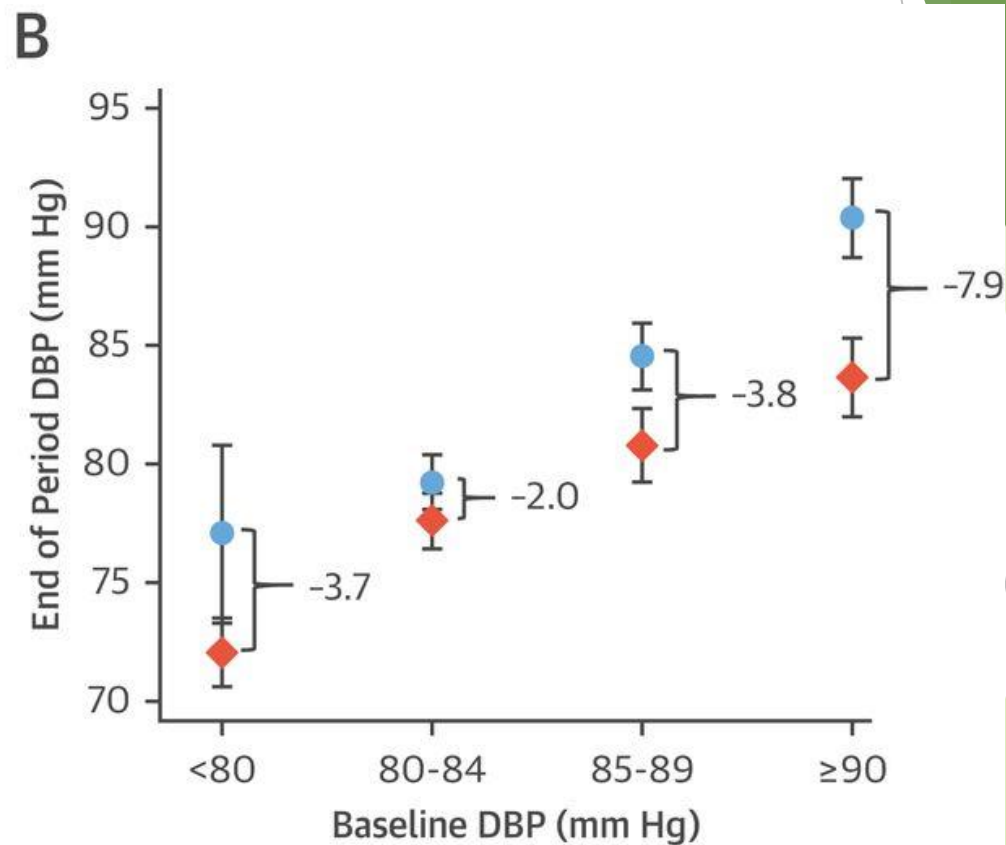
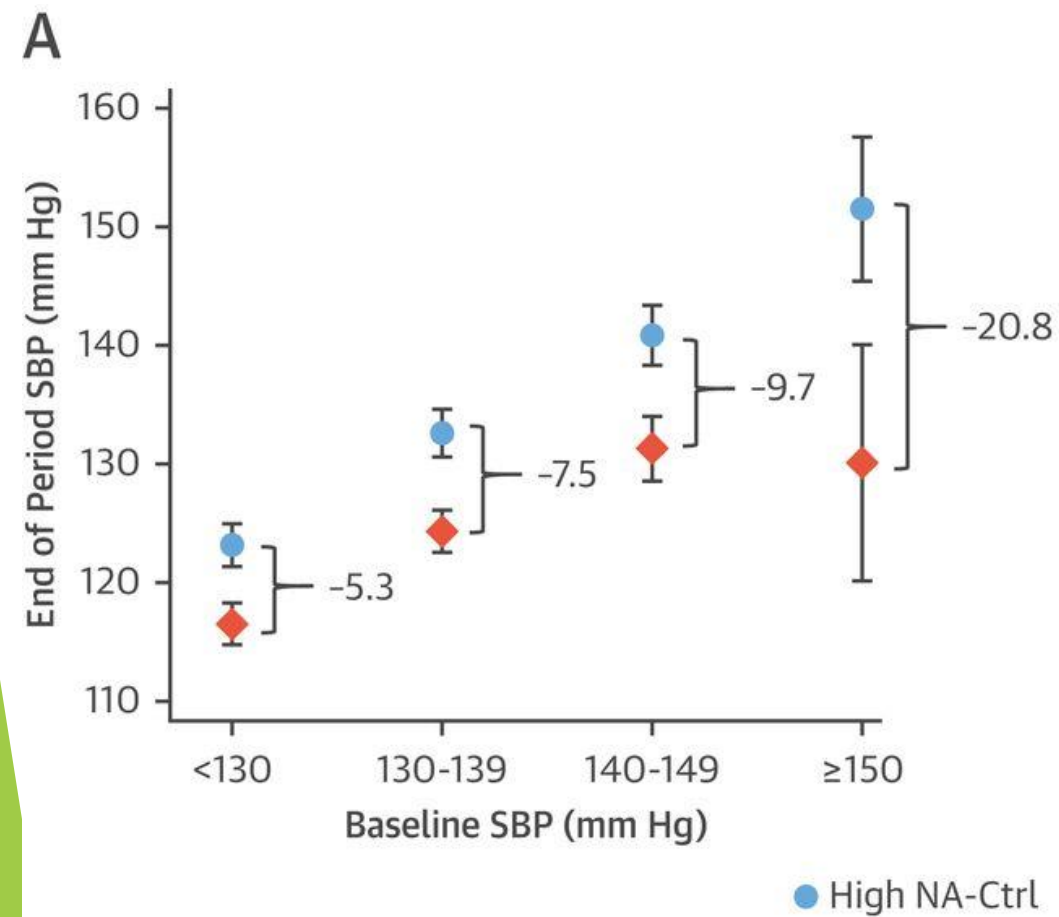
# Tabel 2

Baseline SBP	N*	Reducing Sodium (Low vs. High)			p for Trend‡
		Mean Difference in SBP (95% CI)†	p Value Within Strata	p Value vs. <130 mm Hg Stratum	
In control diet					
<130 mm Hg	70	-3.20 (-4.96 to -1.44)	<0.001	Ref	0.004
130-139 mm Hg	64	-8.56 (-10.70 to -6.42)	<0.001	<0.001	
140-149 mm Hg	53	-8.99 (-11.21 to -6.77)	<0.001	<0.001	
≥150 mm Hg	13	-7.04 (-12.92 to -1.15)	0.02	0.20	
In DASH diet					
<130 mm Hg	75	-0.88 (-2.07 to 0.30)	0.14	Ref	<0.001
130-139 mm Hg	68	-3.29 (-4.71 to -1.88)	<0.001	0.01	
140-149 mm Hg	49	-4.90 (-7.25 to -2.55)	<0.001	0.003	
≥150 mm Hg	12	-10.41 (-15.54 to -5.28)	<0.001	<0.001	

Effect of Low Versus High Sodium on SBP in the Context of Control and DASH Diets

CI = confidence interval; DASH = Dietary Approaches to Stop Hypertension; Ref = reference value; SBP = systolic blood pressure.

- ↵\* Numbers do not entirely add to 204 for control or 208 for DASH due to missing measurements.
- ↵† Adjusted for age, female sex, black race, and baseline body mass index.
- ↵‡ Based on median value in each baseline systolic blood pressure category.



Stephen P. Juraschek et al. JACC 2017;j.jacc.2017.10.011

# TIPS Menjalankan DASH Diet

1. Ketahui kebutuhan gizi dalam sehari
2. Susun menu terencana dan terjadwal berdasarkan prinsip DASH Diet
3. Lakukan yang telah direncanakan

**GOOD LUCK**

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