

SELF-MANAGEMENT & DIABETES MEDICAL NUTRITION THERAPY

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Self-Management

- OUTLINE:
 - Concept self-management
 - Contributing factors of self-managemen
 - Nursing interventions



Diabetes Medical Nutrition Therapy

- **OUTLINE:**

- Nutrition assessment
- Concept of medical nutrition therapy
- Weight management strategy
- Prevention and management of hypoglycemia, hyperglycemia, & dyslipidemia
- Nutritional therapy for child and teens with DM
- Meal planning
- Contributing factors of MNT
- Nursing interention to improve dietary behavior

Self-management



Just a reflection

- Why some people with DM have uncontrolled blood glucose although they have received medications based on current EBM/EBN/Guideline?
- Why some people with DM discontinue their medications?
- Why some people difficult to follow recommended diet and exercise?



Why is self-management important?

People want to live healthy, long, high quality lives.

Diabetes needs to be self-managed.

Diabetes is a personal responsibility.

Health professionals see a person with diabetes a few minutes each year.

24-hours-a-day management is necessary.

Active, informed self-management leads to better long-term outcomes.

(Funnell, Brown, Childs, Haas, Hosey, Jensen, et al., 2007)

(Norris, Lau, Smith, 2002)

(Gary, Genkinger, Guallar, Peyrot, Brancati, 2003)

(Duncan, Birkmeyer, Coughlin, Oujian, Sherr, Boren, 2009)

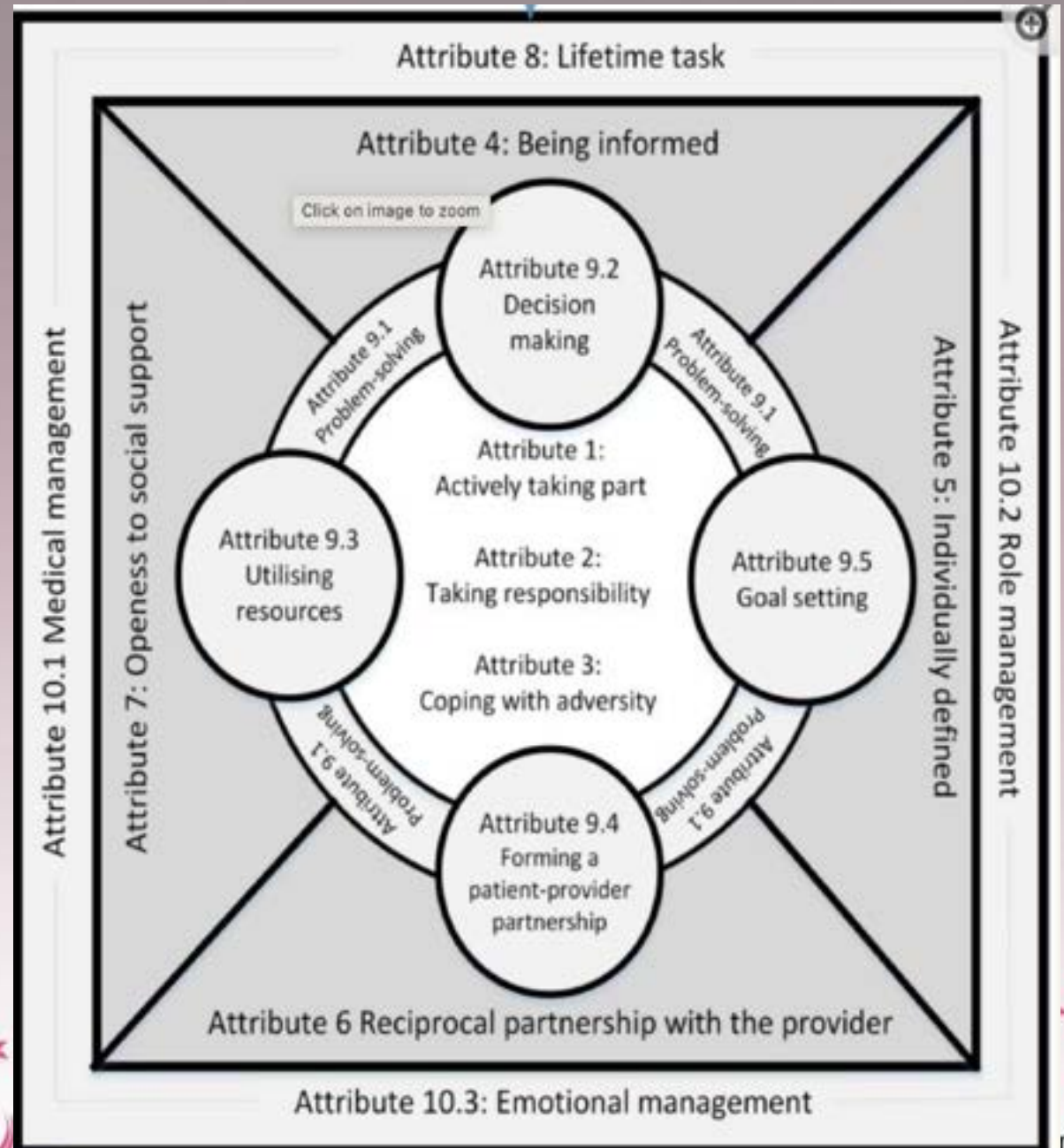
Self-Management

- *Self-management is the intrinsically controlled ability of an active, responsible, informed and autonomous individual to live with the medical, role and emotional consequences of his chronic condition(s) in partnership with his social network and the healthcare provider(s) (de Velde, et al., 2019)*

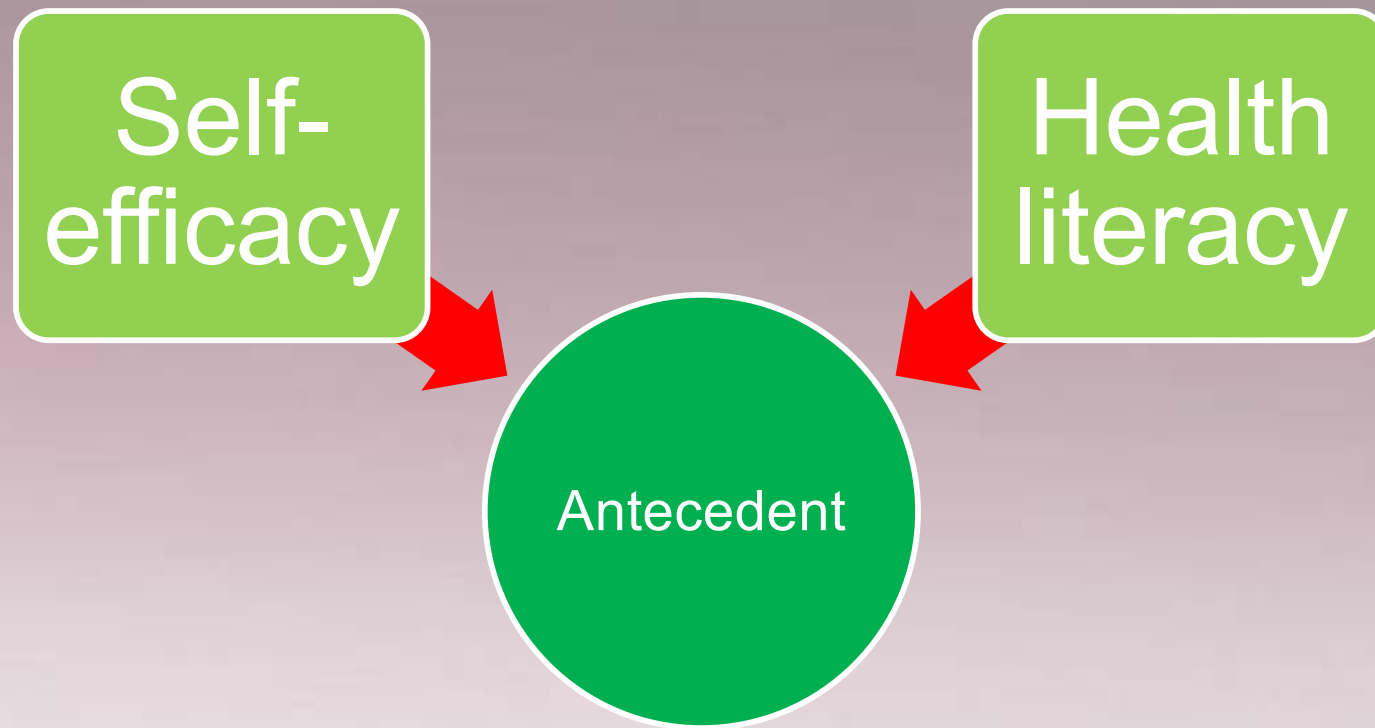


Self Management Characteristics

- Person-oriented attributes: 1-3
 - Person-environment-oriented attributes: 4-7
 - Summarising attributes: 8-10
- (de Velde, et al., 2019)*



Self Management: Antecedent



(de Velde, et al., 2019)

Self Management: Consequences

- Improved health outcomes
- Reduced mortality,
- Improved functional ability,
- Improved quality of life,
- Reduced healthcare costs,
- Improved personal experience,
- Improved social participation,
- Improved functional outcomes,
- Improvements in health behaviours,
- Improved self-efficacy,
- Treatment adherence
- Reduced healthcare resource utilisation

(de Velde, et al., 2019)



What factors that influence self-management?



Contributing Factors of Self-management

Personal Factors

- Age
- Gender
- Socioeconomic status
- Knowledge
- Cultural background
- Self-efficacy
- Psychological status
- Time management

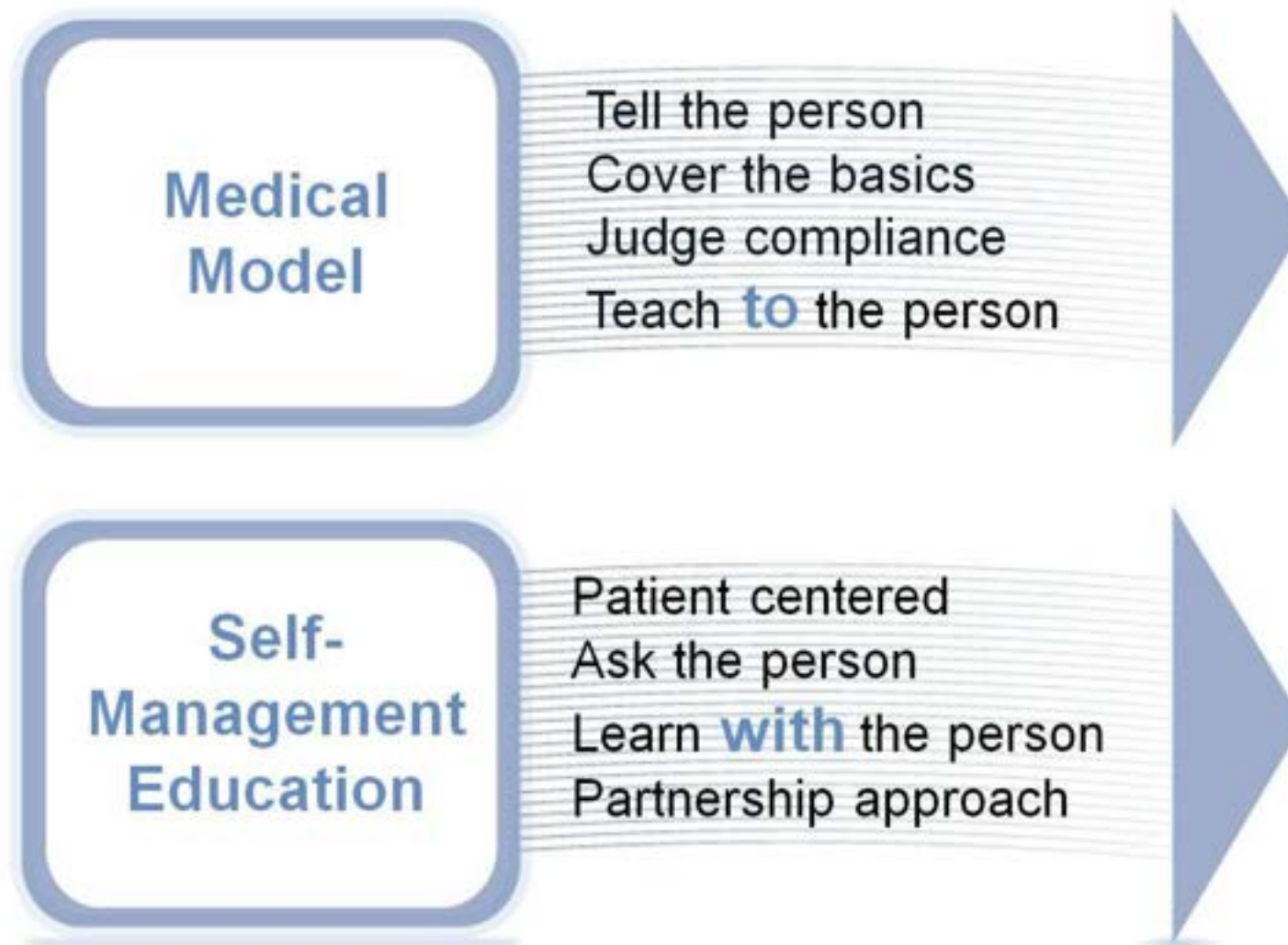
External Factors

- Social support
- Health care providers support

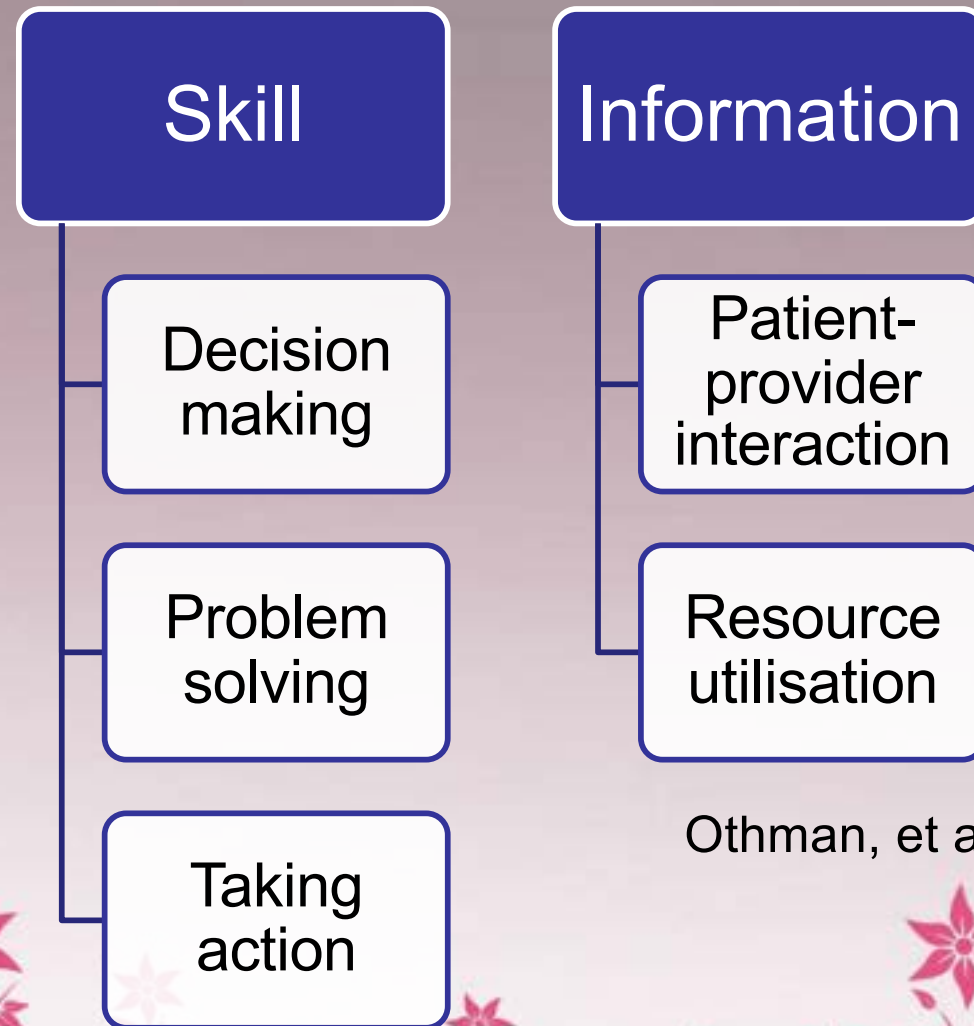
(Primanda, 2011)



So what should we do?

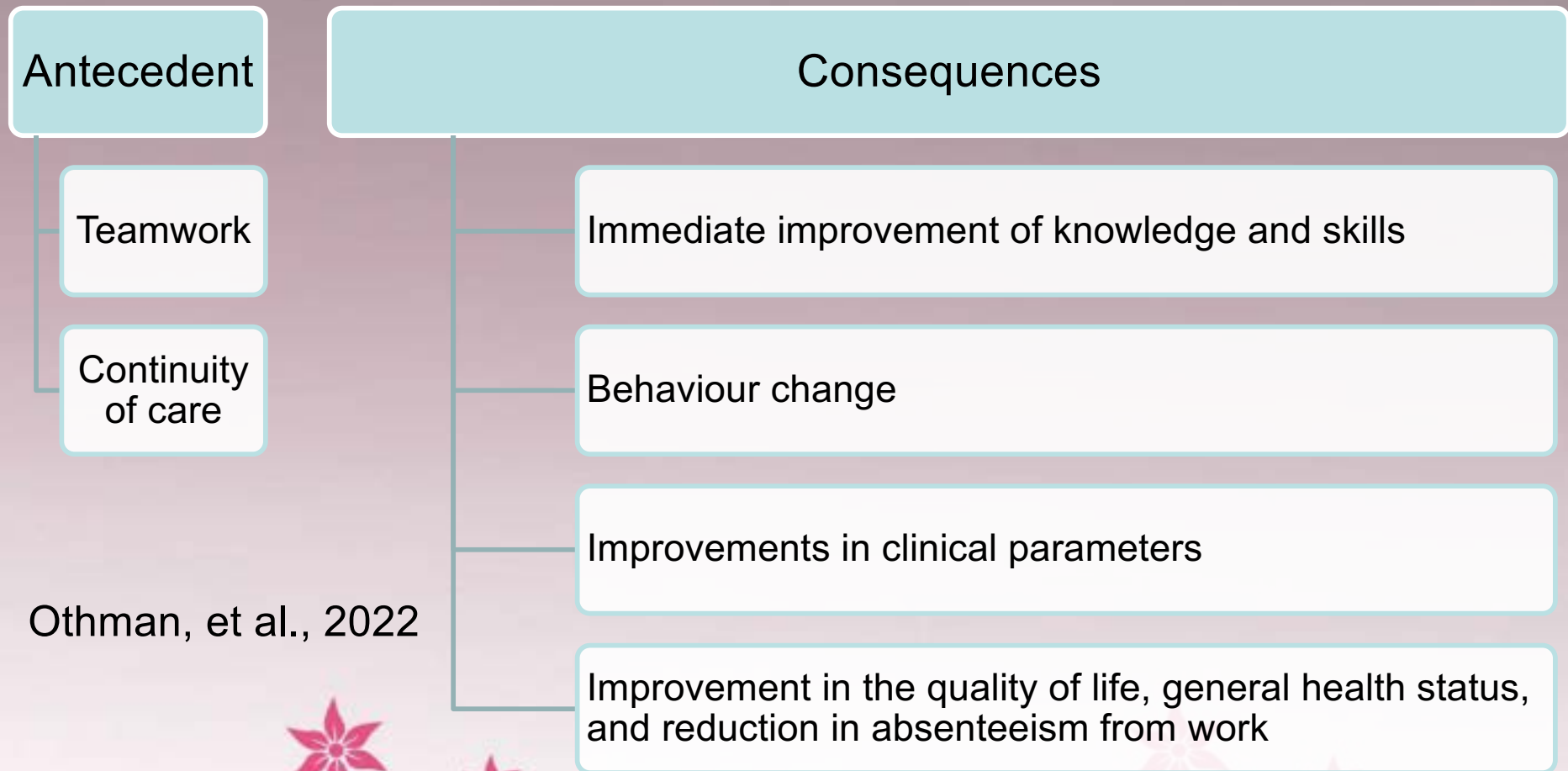


Diabetes Self Management Education (DSME) Intervention Characteristics



Othman, et al., 2022

DSME: Antecedent and Consequences



Self-management Process

1. **Self-monitoring** → deliberately attending to one's own behaviors
2. **Self-evaluation** → compares the information obtained from self-monitoring and the patient's standards for the given behaviors
3. **Self-reinforcement** → reacts cognitively and emotionally to the result of the self-evaluation
4. **Perceived control of the process**



Goal Setting in Self-Management



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Polling Goal Setting & Action Plan



You Can Do It! Are You Ready?

You can make choices that will help your health.
There are three main areas in which you can make choices.



Eat Smart

- Use canola or olive oil
- Drink sugar-free drinks
- Don't supersize—watch portions
- Cut down on red meat
- Use no-salt/low-salt canned vegetables or buy frozen vegetables
- Cut down on fried foods—grill or broil instead
- Learn to count carbohydrates (diabetes)

Your own idea

- Eat more vegetables and fruit
- Use artificial sugar
- Use "make a meal" sheets or a food plan
- Take skin off chicken and fat off red meat

Get Moving

- Take stairs
- Park far from store door
- Get an exercise videotape
- Walk every day (home, mall)
- Walk with your children, grandchildren, or dog

Your own idea

- Do chair exercises
- Ride a bike
- Join an exercise class
- Dance



Personal Health Habits

- Brush and floss your teeth every day
- Reduce or stop smoking
- Take your meds as your doctor or nurse instructs
- Ask about your lab numbers and know what they mean
- Get tested for cancer
- Use sunscreen
- Check your blood sugar as instructed (diabetes)
- Check your feet every day (diabetes)
- See an eye doctor, a foot doctor, or a dentist (diabetes)

Your own idea



Are You Ready?



Date: _____

My Action Plan

I _____ and _____
(name) (name of clinician)
have agreed that to improve my health I will:

1. Choose one of the activities below:

☐ Work on something that's
bothering me:

☐ Stay more physically active!

☐ Take my medications.

☐ Improve my food choices.

☐ Reduce my stress.

☐ Cut down on smoking.

2. Choose your confidence level:

This is how sure I am that I will be
able to do my action plan:



10 VERY SURE

5 SOMEWHAT SURE

0 NOT SURE AT ALL

3. Complete this box for the
chosen activity:

What: _____

How Much: _____

When: _____

How often: _____

(patient signature)

(signature of clinician)

Figure 1. Sample Patient Action Plan

Medical Nutrition Therapy (Diet)



Nutritional Assessment

- A: Antropometri : BB, TB, LiLa
- B: Biochemical : Albumin, Hb, Ureum, Creatinin, dll
- C : Clinical condition: keadaan umum, kulit, rambut, massa otot, dll
- D : Diet : makanan yang dikonsumsi, mual, muntah, nafsu makan, pantangan, TPN, NPO, dll



Nutritional Assessment Tools

- 24-h Food recall
- Subjective Global Assessment
- Nutrition Screening Initiative
- dll



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- A vibrant, cartoon-style illustration of a variety of fruits arranged in a horizontal line. The fruits include a whole watermelon, a slice of watermelon, cantaloupe slices, apples, pears, grapes, and various berries. The illustration is colorful and detailed, with a watermark 'fppt.com' visible in the bottom left corner.

MNT Principles

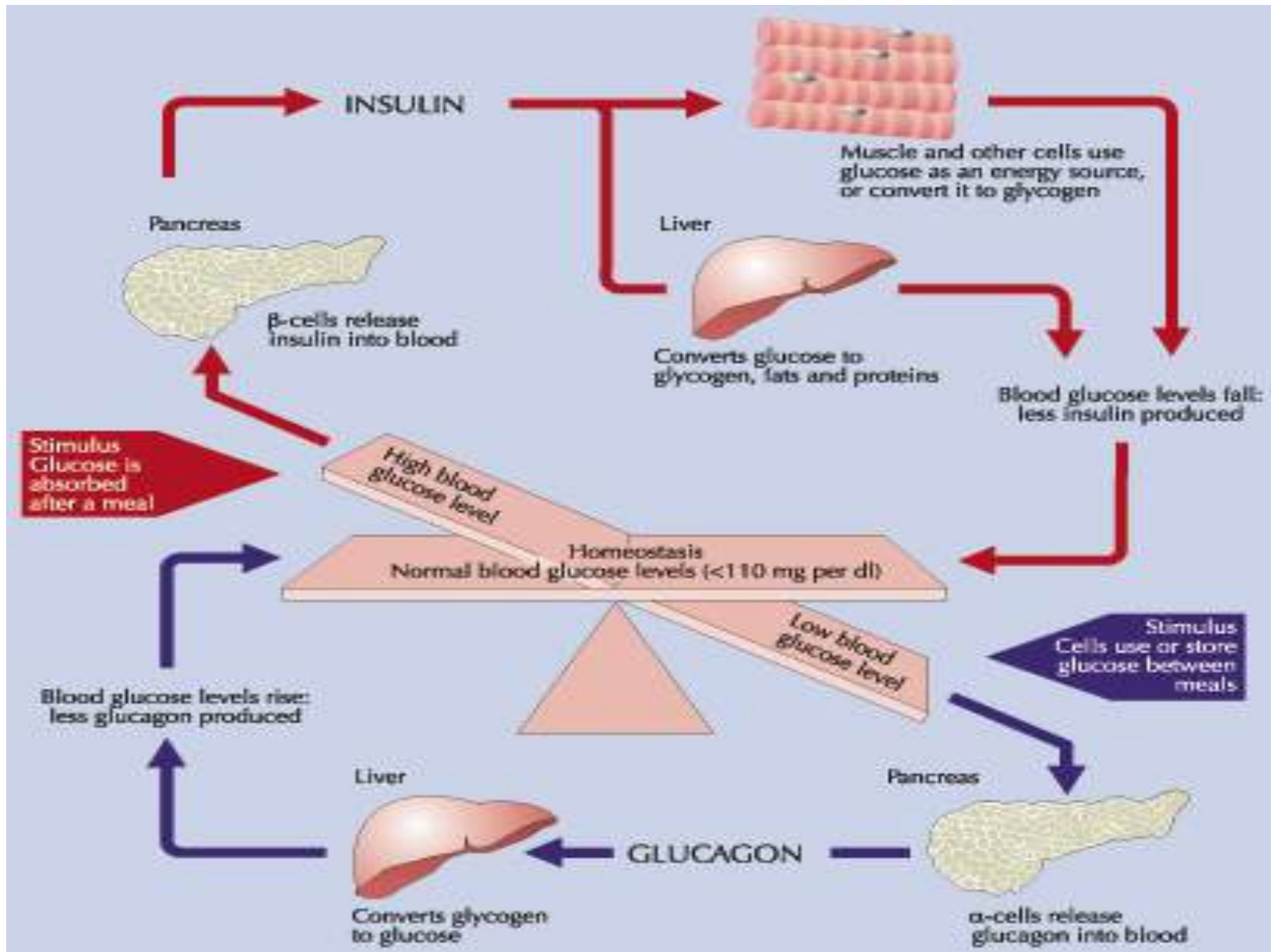
- People with diabetes should follow the healthy diet recommended for the general population, including:
 - Consuming a variety of foods from the 4 food groups (vegetables and fruits; grain products; milk and alternatives; meat and alternatives)
 - Emphasis on foods that are low in energy density and high in volume to optimize satiety and discourage overconsumption.
 - This diet may help a person attain and maintain a healthy body weight while ensuring an adequate intake of carbohydrate (CHO), fiber, fat and essential fatty acids, protein, vitamins and minerals.



MNT Principles...cont

- Merupakan dasar penatalaksanaan DM
- Konsumsi makanan yang seimbang dan sesuai dengan kebutuhan kalori dan zat gizi masing-masing individu
- Tujuan:
 - Berfungsi untuk mengontrol kadar gula darah dan berat badan
 - Memenuhi kebutuhan energi
 - Menjaga kadar kolesterol dan tekanan darah dalam rentang normal
 - Menyesuaikan dengan budaya dan kebutuhan individu
- KUNCI UTAMA → 3J
 - Jumlah kalori
 - Jenis makanan
 - Jadwal makan







Diet Diabetes Melitus (DM) dilakukan dengan pola makan sesuai dengan aturan **3J (Jumlah, Jenis dan Jadwal Makan)**

JUMLAH :

- Jumlah makanan yang dikonsumsi **disesuaikan dengan BB memadai** yaitu BB yang dirasa nyaman untuk seorang diabetesi



- Jumlah makanan yang dikonsumsi **disesuaikan dengan hasil konseling gizi**



JENIS :

- Jenis makanan utama yang dikonsumsi dapat disesuaikan dengan **Konsep Piring Makan Model T**

JADWAL :

- Jadwal makan terdiri dari **3x makan utama** dan **2-3x makanan selingan** mengikuti prinsip porsi kecil.



3j → 1. Jumlah kalori

- Kebutuhan kalori basal: 25-30 kalori / kg BB ideal tergantung jenis kelamin
- Puasa terlalu ekstrim sebaiknya dihindari untuk mencegah abnormalitas hormon, dan mencegah pemecahan glikogen di liver (glikogenolisis) yang akan meningkatkan kadar gula darah



Penghitungan jumlah kalori

- Menentukan status nutrisi
 - Berat Badan Ideal (BBI)
 - Body Mass Index (BMI)
- Memperhatikan faktor lain
- Plate method/metode piring



Apakah factor-faktor yang
mempengaruhi jumlah
kebutuhan kalori?



Berat Badan Ideal (BBI)

- Perhitungan berat badan Ideal (BBI) dengan rumus Brocca yang dimodifikasi adalah sbb:
 - Berat badan ideal = $90\% \times (\text{TB dalam cm} - 100) \times 1 \text{ kg}$.
- Bagi pria dengan tinggi badan di bawah 160 cm dan wanita di bawah 150 cm, rumus dimodifikasi menjadi :
 - Berat badan ideal (BBI) = $(\text{TB dalam cm} - 100) \times 1 \text{ kg}$.
- Kategori:
 - BB Normal : $\text{BB ideal} \pm 10 \%$
 - Kurus : $< \text{BBI} - 10 \%\text{BBI}$
 - Gemuk : $> \text{BBI} + 10 \%\text{BBI}$



Body Mass Index (BMI)

- Perhitungan berat badan ideal menurut Indeks Massa Tubuh.
- Indeks massa tubuh dapat dihitung dengan rumus:
 $IMT = BB(kg)/TB(m^2)$
- Klasifikasi IMT*
 - BB Kurang <18,5
 - BB Normal 18,5-22,9
 - BB Lebih >23,0
 - Dengan risiko 23,0-24,9
 - Obes I 25,0-29,9
 - Obes II >30

*WHO WPR/IASO/IOTF dalam *The Asia-Pacific Perspective: Redefining Obesity and its Treatment*



Faktor Lain

- Jenis Kelamin
 - Kebutuhan kalori pada wanita lebih kecil daripada pria.
 - Kebutuhan kalori wanita sebesar 25 kal/kg BB dan untuk pria sebesar 30 kal/ kg BB.
- Umur
 - Untuk usia antara 40 dan 59 tahun, dikurangi 5%
 - Untuk usia 60 s/d 69 tahun dan dikurangi 10%
 - Di atas 70 tahun dikurangi 20%



Faktor lain ...cont

- Aktivitas Fisik atau Pekerjaan
 - Kebutuhan kalori dapat ditambah sesuai dengan intensitas aktivitas fisik
 - Penambahan sejumlah 10% dari kebutuhan basal diberikan pada keadaan istirahat, 20% pada pasien dengan aktivitas ringan, 30% dengan aktivitas sedang, 40% dengan aktivitas berat, dan 50% dengan aktivitas sangat berat.



- Berat Badan

- Bila kegemukan dikurangi sekitar 20-30% bergantung kepada tingkat kegemukan
- Bila kurus ditambah sekitar 20-30% sesuai dengan kebutuhan untuk meningkatkan BB.
- Untuk tujuan penurunan berat badan jumlah kalori yang diberikan paling sedikit 1000 - 1200 kkal perhari untuk wanita dan 1200 - 1600 kkal perhari untuk pria.



Masih ingat, berapakah
kebutuhan kalori basal?



Kebutuhan kalori basal = 25-30
kalori / kg BB ideal tergantung
jenis kelamin



Plate method

The Plate Method

The Plate Method: Fill half of a 9-inch plate with one cup of non-starchy vegetables; a quarter of the plate with high-protein foods; and a quarter of the plate with carbohydrate foods. Add a small serving of fruit and a serving of dairy.



Sebutkan tentang mitos-mitos
diet/pengaturan makan pada
penyandang DM di daerah
anda!



3j → 2. Jenis makanan

- Tidak ada makanan khusus untuk penderita DM
- Dianjurkan untuk mengonsumsi makanan yang bervariasi yang mengandung:
 - Karbohidrat
 - Protein
 - Lemak
 - Vitamin & Mineral
 - Mikronutrien lainnya

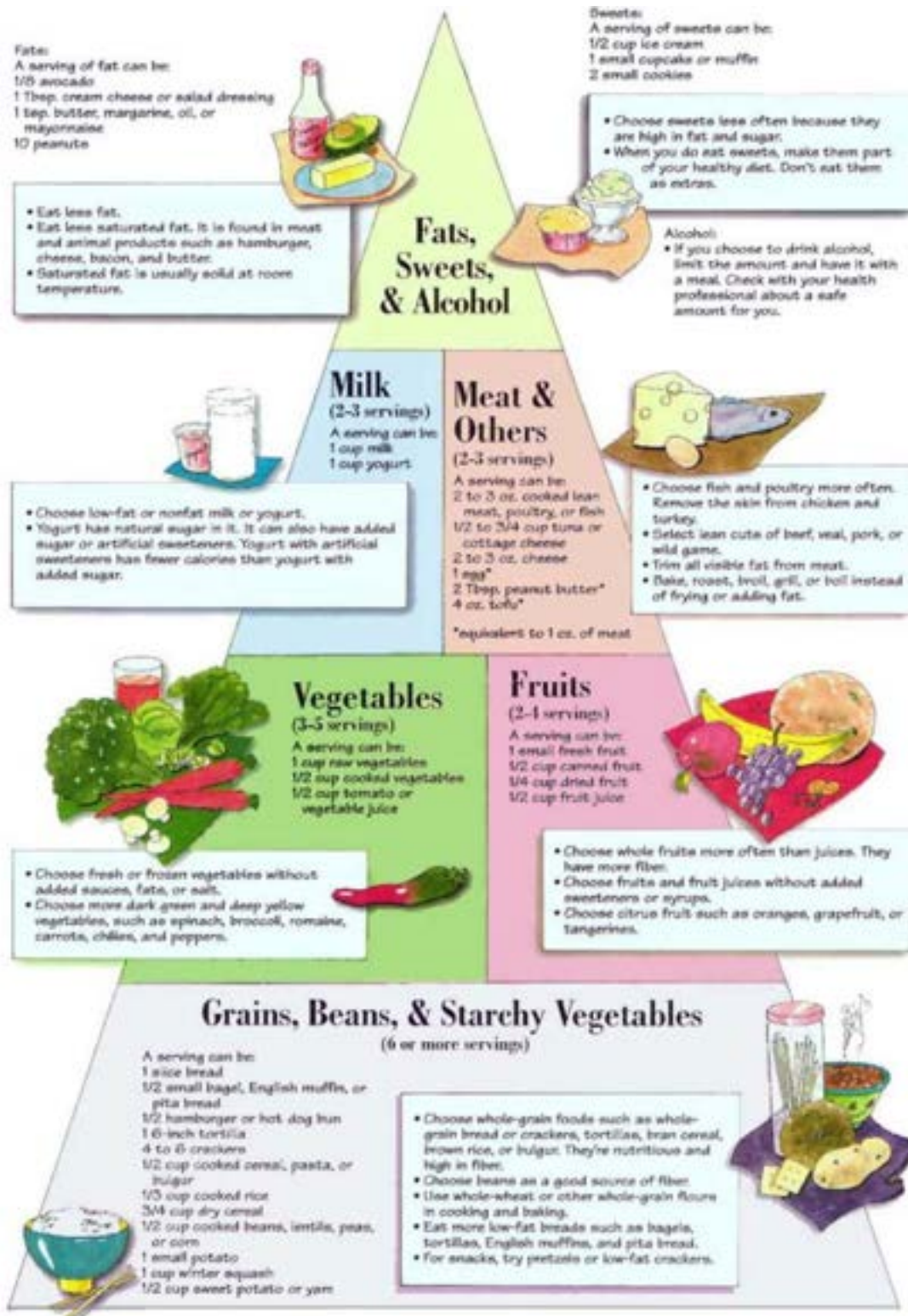


Pemilihan Jenis makanan

- Piramida makanan
- Food exchange list/daftar makanan penukar



Piramida makanan



Food exchange list/daftar makanan penukar

Food List for Diabetes

								How to use the Nutrition Place Mat
Write your meal or daily targets for each food choice in the section below. Plan your meals by choosing foods you like from this Food List for Diabetes.								
Starch & Bread	Fruit	Milk	More Carbos	Vegetables	Meat	Fat	Free Foods	1. Develop an individualized meal plan with your Registered Dietitian, Nurse, Physician or Health Educator. 2. Write your meal plan targets in the space below the food pictures. 3. For your upcoming meal or snack, circle the food item on the list that you will eat. To stay on your meal plan, eat only the total number of items allowed. 4. When your meal is completed, simply wipe off the laminated Nutrition Place Mat with a tissue! 5. Use the Nutrition Place Mat to help follow healthy nutrition guidelines and portion control. The food pictures will help you visualize well-balanced meals!
• Bagel, 4 oz. 1/4 • Beans, dry, cooked, 1/2 cup • Bread, 1 slice • Cereal, cooked, 1/2 cup • Cereal, unsweetened, 3/4 cup • Corn, 1/2 cup • Crackers, snack, 4-5 • English muffin, 1/2 • Hamburger or Hot Dog Bun, 1/2 • Pancakes, 4" across, 1/4" thick, 1 • Pasta, cooked, 1/3 cup • Peas, cooked, 1/2 cup • Pita, 6" across, 1/2 • Popcorn, plain, unbuttered, 3 cups • Potato, 1/2 medium • Potato, mashed, 1/2 cup • Rice, cooked, 1/3 cup • Squash, winter, cooked, 1 cup • Tortilla or taco shell, 6" across, 1 • Waffle, 1 small square	• Apple, 1 small • Apricots, 4 whole • Banana, 1 small • Blackberries/Blueberries, 3/4 cup • Canned fruit in juice or water, 1/2 cup • Dried fruit, 1/4 cup • Fruit juice, 1/3 to 1/2 cup • Grapefruit, 1/2 large • Grapes, 17 small • Kiwi, 1 • Mango, 1/2 small • Melon, 1 cup cubes • Nectarine, 1 small • Orange, 1 small • Peach, medium, fresh, 1 • Pear, large, fresh, 1/2 • Pineapple, fresh, 3/4 cup • Raisins, 2 Tbsp. • Raspberries, 1 cup • Plums, 2 small • Strawberries, 1-1/4 cup, whole • Tangerines, 2 small	• Buttermilk, 1 cup • Evaporated skim, 1/2 cup • Goat's milk, 1 cup • Kefir, 1 cup • Low fat or non fat, 1 cup • Nonfat, dry, 1/3 cup • Soy milk, 1 cup • Yogurt, plain, sugar-free, fat-free, 2/3 cup • Yogurt, low fat, artificially sweetened, 3/4 cup	• Cake, no icing, 2" square, 1 piece • Casserole or hot dish, 1/2 cup • Chili, 1/2 cup • Cookies, 2 small • Cupcake, frosted, 1/2 • Doughnut, glazed, 1/2 medium • Fruit juice bar, 1 • Gingersnaps, 3 • Ice cream, 1/2 cup • Maple syrup, honey, or table sugar, 1 Tbsp. • Muffin, large 1/5 • Nonfat frozen yogurt, 1/3 cup • Pizza, 12" thin crust, 1/8 • Potato chips, 9 to 13 • Pudding, sugar-free, 1/2 cup • Soup, broth, milk, or bean based, 1 cup • Spaghetti or pasta sauce, canned, 1/2 cup • Tortilla chips, 9 to 13 • Vanilla wafers, 5	One serving is 1/2 cup cooked or 1 cup raw * • Asparagus • Beets • Broccoli • Cabbage • Carrots • Cauliflower • Celery • Green Beans • Greens (collard, kale, mustard, spinach) • Mixed vegetables, (without corn, peas or pasta) • Mushrooms • Onions • Pea pods • Peppers • Salad greens (lettuce, spinach) • Tomatoes • Tomato juice • Turnips • Zucchini * If you eat at one meal 3 cups (or more) of raw vegetables OR 1-1/2 cups of cooked vegetables (or more) then count the carbohydrate amount as 1 Carbohydrate Choice.	MEAT • Beef, 1 oz. • Chicken, no skin, 1 oz. • Fish, 1 oz. • Ham, 1 oz. • Lamb, 1 oz. • Pork, 1 oz. • Seafood, 1 oz. • Veal, 1 oz. MEAT SUBSTITUTES • Cottage cheese, 1/4 cup • Cheese, 1 oz. • Egg, 1 • Egg substitute, plain, 1/4 cup • Egg whites, 2 • Peanut butter, 2 Tbsp • Salmon, water packed, 1/4 cup • Tamepoh, 1 oz • Tofu, 1/2 cup • Tuna, 1 oz	• Avocado, med., 2 Tbsp • Bacon, 1 slice (20 sl/b) • Butter, stick, 1 tap • Cream cheese, regular, 1 Tbsp. • Cream cheese, low fat, 1-1/2 Tbsp • Cream, half & half, 2 Tbsp. • Margarine, regular, 1 tsp • Margarine, reduced-fat 1 Tbsp. • Mayonnaise, regular, 1 tsp. • Mayonnaise, reduced fat, 1 Tbsp. • Oil, 1 tap. • Peanuts, 10 nuts • Peanut butter, 1/2 Tbsp. • Salad dressing, regular, 1 Tbsp. • Salad dressing, reduced fat, 2 Tbsp. • Sour cream, regular, 2 Tbsp. • Sour cream, reduced-fat, 3 Tbsp	UNLIMITED USE • Bouillon & broth • Club soda • Coffee or tea • Sugar-free soft drink • Gelatin dessert, sugar-free • Horseradish • Lemon Juice • Mustard • Nonstick cooking spray • Popicles, sugar-free • Spices • Sugar substitutes • Tabasco sauce • Tonic water, sugar free • Vinegar LIMIT 3, and spread intake throughout day! • Candy, hard, sugar-free...1 candy • Cocoa powder, unsweetened, 1 Tbsp. • Catsup, 1 Tbsp. • Cream cheese, fat-free 1 Tbsp. • Dill pickle, med., 1-1/2 • Jam or Jelly, low sugar or light, 1 to 2 tsp. • Mayonnaise, fat-free, 1 Tbsp • Salsa, 1/4 cup • Sour cream, fat-free, 1 Tbsp • Soy sauce, 1 Tbsp • Syrup, sugar-free, 2 Tbsp • Taco sauce, 1 Tbsp • Yogurt, 2 Tbsp Depending on food choice, there will be variable small amounts of C, P, & F in these food choices. Most contain negligible calories.	Food lists with a significant amount of carbohydrate are shown in yellow. These food groups are called "Carbohydrate Choices". Each food group listed contains approximately 15 grams of carbohydrate. See above for approximate accounting of carbohydrate, protein, and fat per serving in each food group. KEY: C = carbohydrate grams, P = protein grams, and F = fat grams. Food lists with little to no carbohydrate are above. Each food group has a different amount of carbohydrate, protein & fat. KEY: C = carbohydrate grams, P = protein grams, and F = fat grams. Food Information Source: USDA Nutrient Database for Standard Ref., Release 19.

Pemilihan Jenis makanan → Karbohidrat

- Karbohidrat yang dianjurkan sebesar 45-65% total asupan energi.
- Pembatasan karbohidrat total <130 g/hari tidak dianjurkan
- Makanan harus mengandung karbohidrat terutama yang berserat tinggi.
- Utamakan karbohidrat kompleks
- Utamakan karbohidrat dengan Indeks Glikemik rendah



Pemilihan Jenis makanan

→ Karbohidrat ..cont

- Gula dalam bumbu diperbolehkan sehingga penyandang diabetes dapat makan sama dengan makanan keluarga yang lain
- Sukrosa tidak boleh lebih dari 5% total asupan energi.
- Pemanis alternatif dapat digunakan sebagai pengganti gula, asal tidak melebihi batas aman konsumsi harian (*Accepted Daily Intake*)



175 kalori
4 gram protein
40 gram karbohidrat



Bihun 1/2 gelas (50 g)



Bubur beras 2 gelas (400 g)



Kentang 2 biji sedang (200 g)



Krakers 5 buah besar (50 g)



Mi kering 1 gelas (50 g)



Nasi 3/4 gelas (100 g)



Roti putih 3 iris (70 g)



Tepung terigu 8 sdm (50 g)

Bahan Makanan	URT	Berat (gram)
Bihun	$\frac{1}{2}$ gls	50
Bubur beras	2 gls	400
Kentang	2 bj sdg	200
Krakers	5 bh bsr	50
Maizena (*)	8 sdm	40
Mi basah	$1 \frac{1}{2}$ gls	200
Mi kering	1 gls	50
Nasi	$\frac{3}{4}$ gls	100
Nasi jagung	$\frac{3}{4}$ gls	100
Nasi tim	1 gls	200
Roti putih	4 iris	80
Singkong (*)	1 ptg sdg	100
Talas	1 bj bsr	200
Tepung beras	8 sdm	50
Tepung sagu (*)	7 sdm	40
Tepung singkong (*)	8 sdm	40
Tepung terigu	8 sdm	50
Ubi	1 bj sdg	150

Keterangan: bahan makanan yang ditandai (*) kurang mengandung protein, hingga perlu ditambah $\frac{1}{2}$ satuan penukar bahan makanan sumber protein

Pemilihan Jenis makanan → protein

- Dibutuhkan sebesar 10 – 20% total asupan energi.
- Sumber protein yang baik adalah **seafood (ikan, udang, cumi, dll)**, daging tanpa lemak, ayam tanpa kulit, produk susu rendah lemak, kacang-kacangan, tahu, tempe.
- Pada pasien dengan nefropati perlu penurunan asupan protein menjadi 0,8 g/kg BB perhari atau 10% dari kebutuhan energi dan 65% hendaknya bernilai biologik tinggi.





Bakso daging 10 biji sdg (100 g) Daging ayam 1 potong sdg (50 g)

95 kalori
10 gram protein
6 gram lemak



Daging sapi 1 potong sdg (50 g) Ikan segar 1 potong sdg (50 g)



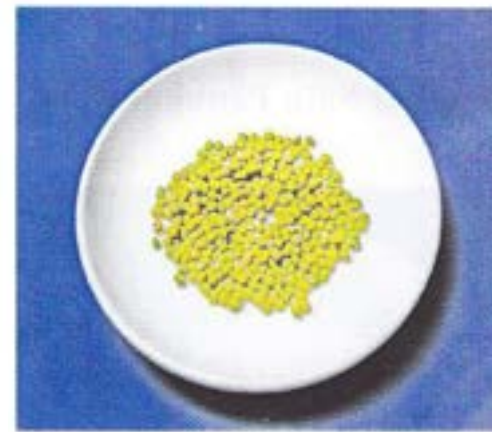
Telur ayam 1 butir (75 g)



Udang basah 1/4 gelas (50 g)

Bahan Makanan	URT	Berat (gram)
Babat	2 ptg sdg	60
Bakso daging	20 bj kcl	100
Bakso daging	10 bj kcl	100
Daging ayam	1 ptg sdg	50
Daging babi	1 ptg kcl	25
Daging sapi	1 ptg sdg	50
Didih sapi	2 ptg sdg	50
Hati sapi	1 ptg sdg	50
Ikan asin	1 ptg sdg	25
Ikan segar	1 ptg sdg	50
Ikan teri	2 sdm	25
Keju	1 ptg sdg	30
Telur ayam biasa	2 btr	75
Telur ayam negeri	1 btr bsr	60
Telur bebek	1 btr	60
Udang basah	$\frac{1}{4}$ gls	50
Usus sapi	3 bulatan	75

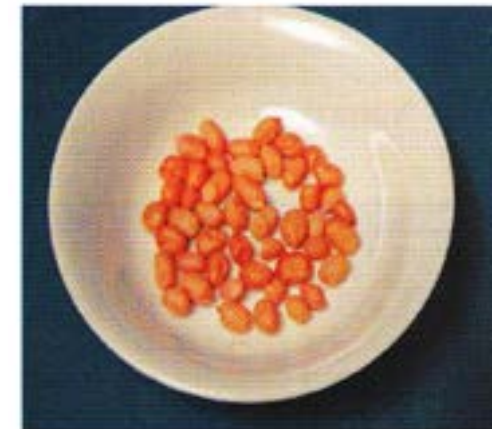
80 kalori
6 gram protein
3 gram lemak
8 gram karbohidrat



Kacang hijau 2 ½ sdm (25 g)



Kacang merah 2 ½ sdm (25 g)



Kacang tanah 2 ½ sdm (25 g)



Kacang tolo 2 ½ sdm (25 g)



Tempe 2 potong sedang (50 g)



Tahu 2 biji sedang (100 g)

Bahan Makanan	URT	Berat (gram)
Kacang hijau	2 ½ sdm	25
Kacang kedelai	2 ½ sdm	25
Kacang merah	2 ½ sdm	25
Kacang tanah	2 sdm	20
Kacang tolo	2 ½ sdm	25
Oncom	2 ptg sdg	50
Tahu	2 bj sdg	100
Tempe	2 ptg sdg	50

Pemilihan Jenis makanan

→ lemak

- Asupan lemak dianjurkan sekitar 20-25% kebutuhan kalori. Tidak diperkenankan melebihi 30% total asupan energi.
- Lemak jenuh < 7 % kebutuhan kalori
- Lemak tidak jenuh ganda < 10 %, selebihnya dari lemak tidak jenuh tunggal.
- Bahan makanan yang perlu dibatasi adalah yang banyak mengandung lemak jenuh dan lemak trans antara lain : daging berlemak dan susu penuh (*whole milk*).
- Anjuran konsumsi kolesterol < 200 mg/hari



No.	Nama Makanan (10 gr)	Kolesterol (Mg)	Kategori
1	Putih Telur Ayam	0	Sehat
2	Teripang (Halsom)	0	Sehat
3	Ubur-ubur	0	Sehat
4	Susu Sapi Non Fat	0	Sehat
5	Daging Ayam Pilihan Tanpa Kulit	50	Sehat
6	Daging Bebek Pilihan Tanpa Kulit	50	Sehat
7	Ikan Sungai Biasa	55	Sehat
8	Daging Sapi Pilihan Tanpa Lemak	60	Sehat
9	Daging Kelinci	65	Sehat
10	Daging Kambing Tanpa Lemak	70	Sehat
11	Ikan Bkor Kuning	85	Sehat
12	Daging Asap (Ham)	98	Sekali-sekali
13	Iga Sapi	100	Sekali-sekali
14	Daging Sapi Pilihan Tanpa Lemak	105	Sekali-sekali
15	Burung Dara	110	Sekali-sekali
16	Ikan Bawal	120	Sekali-sekali
17	Daging Sapi Berlemak	125	Sekali-sekali
18	Gajih Sapi	130	Hati-hati
19	Gajih Kambing	130	Hati-hati
20	Keju	140	Hati-hati
21	Sosis Daging	150	Hati-hati
22	Kepiting	150	Hati-hati
23	Udang	160	Hati-hati
24	Kerang/ Siput	160	Hati-hati
25	Belut	185	Berbahaya
26	Santan Kelapa	185	Berbahaya
27	Susu Sapi Non Fat	250	Berbahaya
28	Susu Sapi Cream	280	Berbahaya
29	Coklat/ Cacao	290	Berbahaya
30	Mentega/ Margarin	300	Berbahaya
31	Jeroan Sapi	380	Berbahaya
32	Kerang Putih/ Remis/ Tiram	450	Berbahaya
33	Telur Ayam	500	Berbahaya
34	Jeroan Kambing	610	Berbahaya
35	Cumi-cumi	1170	Pantang
36	Kuning Telur Ayam	2000	Pantang
37	Otak Sapi	2300	Pantang
38	Telur Burung Ruyuh	3640	Pantang



Pemilihan Jenis makanan

→ Buah Buahan

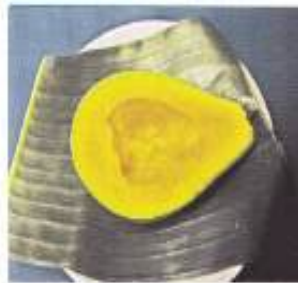
40 kalori

10 gram karbohidrat

Bahan Makanan	URT	Berat (gram)
Alpukat	$\frac{1}{2}$ bh bsr	50
✓ Anggur	10 bj	75
Apel	1 bh sdg	75
Belimbing	1 bh bsr	125
✓ Duku	15 bh	75
✓ Durian	3 bj	50
Jambu air	2 bh sdg	100
Jambu biji	$\frac{1}{2}$ bh bsr	100
Jambu bol	$\frac{3}{4}$ bh sdg	75
✓ Jeruk manis	1 bh bsr	100
Kedondong	1 bh bsr	100
✓ Mangga	$\frac{1}{2}$ bh bsr	50
Melon	1 ptg bsr	150
✓ Nangka masak	3 bj	50
✓ Nenas	1/6 bh sdg	75
Papaya	1 ptg sdg	100
Pisang ambon	1 bh kcl	50
✓ Rambutan	8 bh	75
Salak	1 bh bsr	75
✓ Sawo	1 bh sdg	50
Semangka	2 ptg kcl	150
✓ Sirsak	$\frac{1}{2}$ gls	75

Keterangan :

1. Buah-buahan ditimbang tanpa kulit dan biji



Alpukat $\frac{1}{2}$ buah besar (50 g)



Anggur 10 biji (75 g)



Melon 1 potong besar (150 g)



Nanas 1/6 buah sedang (75 g)



Apel 1 buah sedang (75 g)



Belimbing 1 buah besar (125 g)



Pepaya 1 potong sedang (100 g)



Pisang 1 buah kecil (50 g)



Jambu biji 1/2 buah besar (100 g)



Jeruk manis 1 buah besar (100 g)



Semangka 2 potong kecil (150 g)



Rambutan 8 buah (75 g)

Pemilihan Jenis makanan

→ Minyak

Bahan Makanan	URT	Berat (gram)
Margarin	1 sdm	5
Minyak kelapa	1 sdm	5
Minyak ikan	1 sdm	5
Kelapa	1 ptg kcl	30
Kelapa parut	2 $\frac{1}{2}$ sdm	30
Lemak babi	1 ptg kcl	5
Lemak sapi	1 ptg kcl	5
Santan	$\frac{1}{2}$ gls	50

50 kalori
5 gram lemak



Pemilihan Jenis makanan

→ Susu

Bahan Makanan	URT	Berat (gram)
Yoghurt	1 gls	200
Susu kambing	$\frac{3}{4}$ gls	150
Susu kental tak manis	$\frac{1}{2}$ gls	100
Susu kerbau	$\frac{1}{2}$ gls	100
Susu sapi	1 gls	200
Susu rendah lemak	1 gls	200
Tepung saridele	4 sdm	25
Tepung susu krim	4 sdm	20
Tepung susu whole	5 sdm	25

130 kalori
7 gram protein
7 gram lemak
9 gram karbohidrat



Pemilihan Jenis makanan → vitamin & mineral

- Tidak ada suplemen khusus yang harus dikonsumsi oleh penyandang DM
- Kebutuhan vitamin dan mineral sama dengan kebutuhan orang yang tidak menyandang DM lainnya



Pemilihan Jenis makanan

→ Mikronutrien lain

- **Natrium**

- Anjuran asupan natrium untuk penyandang diabetes sama dengan anjuran untuk masyarakat umum yaitu tidak lebih dari 3000 mg atau sama dengan 6-7 g (1 sendok teh) garam dapur.
- Mereka yang hipertensi, pembatasan natrium sampai 2400 mg garam dapur.
- Sumber natrium antara lain adalah garam dapur, vetsin, soda, dan bahan pengawet seperti natrium benzoat dan natrium nitrit.

- **Serat**

- Sumber serat dari kacang-kacangan, buah dan sayuran serta sumber karbohidrat yang tinggi serat, karena mengandung vitamin, mineral, serat dan bahan lain yang baik untuk kesehatan.
- Anjuran konsumsi serat adalah ± 25 g/1000 kkal/hari.



Pemilihan Jenis makanan

→ Mikronutrien lain...cont

- **Pemanis alternatif**

- Pemanis dikelompokkan menjadi pemanis bergizi dan pemanis tak bergizi. Termasuk pemanis bergizi adalah gula alkohol dan fruktosa.
- Gula alkohol antara lain *isomalt*, *lactitol*, *maltitol*, *mannitol*, *sorbitol* dan *xylitol*.
- Dalam penggunaannya, pemanis bergizi perlu diperhitungkan kandungan kalornya sebagai bagian dari kebutuhan kalori sehari.
- Fruktosa tidak dianjurkan digunakan pada penyandang diabetes karena efek samping pada lemak darah.
- Pemanis tak bergizi termasuk: aspartam, sakarin, acesulfame potassium, sukralose, neotame.
- Pemanis aman digunakan sepanjang tidak melebihi batas aman (*Accepted Daily Intake/ADI*)



3J → 3. Jadwal makan

- Makan teratur di jam yang sama
- Tidak menunda makan
- Perhatikan obat yang harus dikonsumsi/insulin yang di suntik
- Frekuensi makan → untuk mendistribusikan asupan karbohidrat dalam sehari
 - 3 kali makan utama (makan pagi 20%, siang 30%, dan sore 25%)
 - Kalau diperlukan dapat diberikan makanan selingan buah atau makanan lain sebagai bagian dari kebutuhan kalori sehari (10-15%)



Food Label

Start Here

Check Serving Size

Check Calories

Limit These Nutrients

Get Enough of
These Nutrients

Nutrition Facts

Serving Size 1/2 cup (114g)
Servings Per Container 4

Amount Per Serving

Calories 90 Calories from Fat 30

	% Daily Value*
Total Fat 3g	5%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 300mg	13%
Total Carbohydrate 13g	4%
Dietary Fiber 3g	12%
Sugars 3g	
Protein 3g	

Vitamin A 270% • Vitamin C 10%
Calcium 2% • Iron 4%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	30g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Quick Guide
to % Daily Value

5% or less is low
20% or more is high

Footnotes

APA MAKANAN KESUKAAN ANDA???

- Mie instan
- Minuman bersoda
- Minuman berenergi
- Minuman kemasan
- Chips
- dll





Mi goreng Sate



CARA PENYAJIAN :

- Rebus mi dalam 400 cc (2 gelas) air mendidih selama 3 menit sambil diaduk.
 - Sementara mi direbus, campurkan bumbu, minyak bumbu, kecap manis, dan bubuk cabe ke dalam piring.
 - Tiriskan mi, kemudian campurkan mi ke dalam campuran bumbu di piring, diaduk hingga merata.
 - Taburkan bawang goreng dan mi lezat siap disajikan.
-
- Siapkan mangkok tahan panas (microwaveable), isi dengan air 350 cc (1,5 gelas), masukkan mi ke dalamnya.
 - Masukkan ke dalam microwave, masak dengan suhu tinggi selama 5 menit.
 - Tiriskan mi, kemudian campurkan mi dengan bumbu, minyak bumbu, kecap manis dan bubuk cabe, lalu diaduk hingga merata.
 - Taburkan bawang goreng dan mi lezat siap disajikan.

Indomie Seleraku...



" JANGAN DITERIMA BILA KEMASAN RUSAK "

Bila diinginkan, tambahkan sayur dan telur atau bahan lain sesuai selera.

KOMPOSISI MI : Tepung terigu, minyak sayur, tepung tapioka, garam, pemantap nabati, pengatur kemasaman, mineral (zat besi), pewarna (CI 19140), dan antioksidan (TBHQ).

BUMBU : Gula, garam, penguat rasa mononatrium glutamat (MSG), perisa ayam, bubuk bawang merah, bubuk lada, bubuk bawang putih, vitamin (A, B1, B6, B12, Niasin, Asam Folat, Pantotenat) dan bubuk cabe.

MINYAK : Minyak sayur dan bumbu sate.

KECAP MANIS : Gula, air, garam, kedelai, gandum, dan pengawet (natrium benzoat, metil p-hidroksibenzoat).

BAWANG GORENG

INFORMASI	JUALAH PER SAJIAN		JUALAH PER SAJIAN	
		% AKG*		% AKG*
Takaran saji 1 bks 80 g Jumlah Sajian per Kemasan 1 Energi Total 420 kkal Energi dari Lemak 140 kkal	Kolesterol	0 mg 0 %	Karbohidrat Total	62 g 21 %
	Protein	7 g 11 %	Gula	6 g 12 %
	Vitamin A	15 %	Natrium	760 mg 33 %
	Vitamin B1	35 %	Niasin	15 %
	Vitamin B6	25 %	Asam Folat	30 %
	Vitamin B12	15 %	Asam Pantotenat	10 %
			Kalsium	4 %
			Zat Besi	30 %

*Persen AKG berdasarkan kebutuhan energi 2000 kkal, kebutuhan energi anda mungkin lebih tinggi atau lebih rendah



WWW.THERAMENRATER.COM

Consumer service/Pelayanan konsumen :
PO. BOX. 1213 Jakarta Utara 14430, Indonesia



Komposisi :

Kentang, Minyak Kelapa Sawit, Bumbu Keju
 mengandung Bubuk Keju, Penguat Rasa,
 Monosodium Glutamat, Disodium Inosinat,
 Disodium Guanilat, Pewarna Makanan
 (Paprika, Kapsantin, Anato CI 75120,
 FCF CI 15985, Tartrazin CI 19140).

Bahan :

Minyak, Palm Olein, Cheese Seasoning
 Powder, Cheese Powder, Flavor Enhancer
 Disodium Glutamate, Disodium Inosinate,
 Disodium Guanylate, Food Coloring Paprika
 Ekstrak, Capsanthin, Annatto CI 75120,
 Sunset Yellow FCF 15985, Tartrazin CI
 19140).

INFORMASI NILAI GIZI

Takaran Saji : 18 g

Jumlah Sajian per Kemasan : ± 4

JUMLAH PER SAJIAN

Energi Total 100 kkal

Energi dari Lemak 4,5 kkal

		% AKG *
Lemak Total	5 g	8 %
Protein	1 g	2 %
Karbohidrat Total	11 g	4 %
Natrium	30 mg	1 %

*Persen AKG berdasarkan kebutuhan energi 2000 kkal.
 Kebutuhan energi anda mungkin lebih tinggi atau lebih rendah.



Baik digunakan sebelum / Best before
 Kode produksi / Production code

03 JUL 15
 TGR10A 13:57



Coca-Cola

20 fl oz bottle

GO

nutrition

ingredients

varieties



similar products



Nutrition Facts

Serving Size 1 bottle

Servings Per Container 1

Amount Per Serving

Calories 240

% Daily Value*

Total Fat 0g 0%

Sodium 75mg 3%

Total Carbohydrate 65g 22%

Sugars 65g

Protein 0g

Not a significant source of fat, calories, saturated fat, trans fat, cholesterol, fiber, vitamin A, vitamin C, calcium and iron.

*Percent Daily Values (DV) are based on a 2,000 calorie diet.



ENERGEN

SEREAL & SUSU BERGIZI

Komposisi : Gula, Krimer, Terigu, Susu bubuk, Kakao bubuk, Jagung, Oat, Kalsium karbonat, Garam, Premiks vitamin, Telur, Ekstrak malt.

INFORMASI NILAI GIZI

Takaran saji : 1 sachet (29 g)
Jumlah sajian per kemasan : 5

JUMLAH PER SAJIAN

Energi total	130	kkal
Energi dari lemak	30	kkal
% AKG*		
Lemak total	3.5 g	5%
Lemak jenuh	1.5 g	8%
Kolesterol	0 g	0%
Protein	1 g	2%
Karbohidrat total	24 g	8%
Serat pangan	1 g	5%
Gula	18 g	
Natrium	110 mg	5%
Vitamin A		30%
Vitamin B1		15%
Vitamin B2		20%
Vitamin B6		15%
Asam folat		20%
Vitamin B12		25%
Vitamin D		15%
Vitamin E		10%
Kalsium		15%

* Persen AKG berdasarkan kebutuhan energi 2000 kkal.
Kebutuhan energi anda mungkin lebih tinggi atau lebih rendah.



Layanan konsumen :

PT TORABIKA EKA SEMESTA

PO Box 6138, Jakarta 11061, Indonesia

E-mail : consumer@mayora.co.id



8 886001 100305

Satu lagi dari



Baik digunakan sebelum :
Kode produksi :

FGT 2015

CK2608600674



***PREVENTION AND
MANAGEMENT OF
HYPOGLYCEMIA***



Hypoglycemia

- *Hypoglycemia: Abnormally low blood glucose level ($<70\text{mg/dL}$)*
- *Causes*
 - *Too much insulin or oral hypoglycemic agents*
 - *Too little food or excessive exercise*
 - *Delayed or skipped meals*



Management/Teaching

- *Treat hypoglycemia using Rule of 15*
- *Teaching Component*
 - *Teach patients to carry some form of simple sugar with them at all times.*
 - *Avoid over treating hypoglycemia*
 - *Consistent pattern of eating and administering of insulin.*



Warning Signs that Require Action

Hypoglycemia

- Sweating
- Shakiness
- Anxiety
- Confusion
- Difficulty speaking
- Uncooperative behavior
- Paleness
- Irritability
- Dizziness
- Inability to swallow
- Seizure
- Loss of consciousness

Hyperglycemia

- Flushed skin
- Labored breathing
- Confusion
- Cramps
- Very weak
- Sweet breath
- Nausea
- Loss of consciousness

Emergency Treatment

Hypoglycemia

- Give ½ can sugared (non-diet) soda – unless the person cannot swallow
- Obtain immediate assistance from a qualified health care professional
- Continue to give sugar source every 15 minutes until blood sugar > 70
- If unconscious, give Glucagon or D₅₀ IV

Hyperglycemia

- Give access to water
- Give access to bathroom
- Give access to medication
- Obtain immediate assistance from a qualified health care professional
- Give regular **NOT LONG-ACTING** insulin

Thank You

