

ANTIDIABETICS

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Antidiabetic Agents: Effects on Glycemia and Potential for Cardiovascular Risk Reduction



**21.16 CHECKLIST FOR FOLLOW-UP OF
PATIENTS WITH DIABETES MELLITUS.**

Body weight (body mass index)

Urinalysis

Glycaemic control

Hypoglycaemic episodes

Blood pressure

Eye examination

Lower limbs

Feet

Type 1 diabetes

Insulin

Weight maintenance diet

Non-obese

Obese

Low-energy diet

Insulin + diet

Insulin regimens

- Multiple injection (basal-bolus)
Short-acting insulin before meals
Intermediate or long-acting insulin, once or twice daily
- Twice-daily insulins in combination:
Soluble or fast-acting analogue
Isophane or longer-acting analogue
- Continuous subcutaneous insulin infusion

Type 2 diabetes

Weight maintenance diet

Non-obese

Sulphonylurea

Obese

Metformin

Low-energy diet

Sulphonylurea

+
metformin
or add

- Thiazolidinedione
- α -glucosidase inhibitor
- Prandial glucose regulator
- Bedtime isophane or long-acting insulin analogue

Diet

Monotherapy

Combined therapy

Insulin

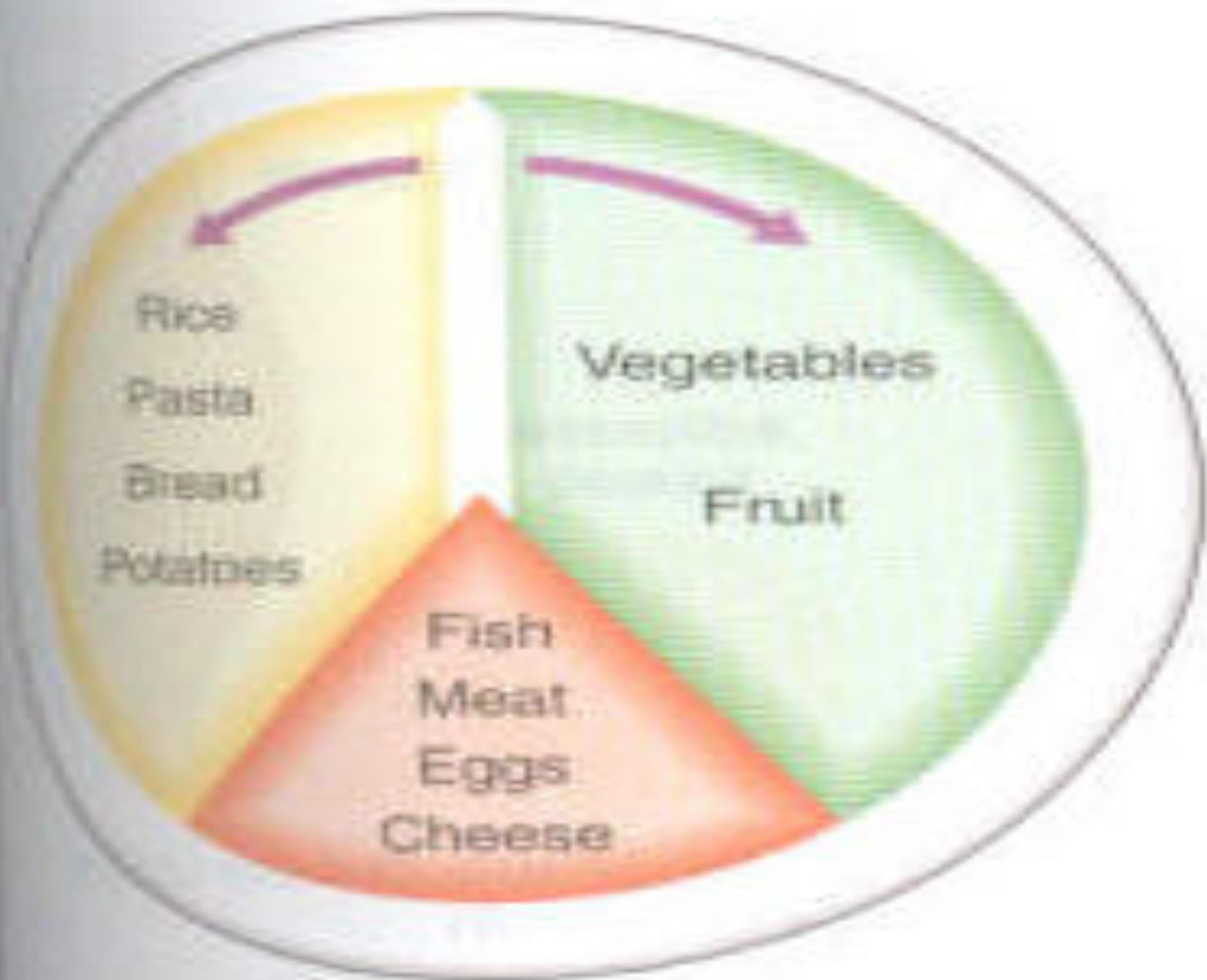
21.33 AIMS OF DIETARY MANAGEMENT



- Achieve good glycaemic control
- Reduce hyperglycaemia and avoid hypoglycaemia
- Assist with weight management
- Reduce the risk of micro- and macrovascular complications
- Ensure adequate nutritional intake
- Avoid 'atherogenic' diets or those that aggravate complications, e.g. high protein intake in nephropathy

21.34 RECOMMENDED COMPOSITION OF DIET FOR PEOPLE WITH DIABETES

	Percentage of energy intake
Carbohydrate	45–60%
Sucrose	Up to 10%
Fat (total)	< 35%
n-6 Polyunsaturated	< 10%
n-3 Polyunsaturated	Eat oily fish once or twice weekly
Monounsaturated	10–20%
Saturated	< 10%
Protein	10–15% (do not exceed 1 g/kg)



21.35 EFFECTS OF HYPOGLYCAEMIC DRUGS USED IN THE TREATMENT OF TYPE 2 DIABETES

	Insulin	Sulphonyl-ureas	Metformin	Acarbose	Thiazolidinediones	Meglitinides and amino acid derivatives
Reduce basal glycaemia	Yes	Yes	Yes	Slight	Yes	?
Reduce post-prandial glycaemia	Yes	Yes	Yes	Yes	Yes	Yes
Raise plasma insulin	Yes	Yes	No	No	No	Yes
Increase body weight	Yes	Yes	No	No	Yes	Yes
Improve lipid profile	Yes	No	Slight	Slight	Variable	No
Risk of hypoglycaemia	Yes	Yes	No	No	No	Yes
Tolerability	Good	Good	Moderate	Moderate	Good	Good



Thank you