Cardiovascular diseases are the most prevalent of mortality in non insulin-dependent diabetics (NIDDM). These patients are often hypertriglyceridemic while cholesterol of LDL was in normal range. The apoB100 metabolism was explored in NIDDM subjects by endogenous labeling in large VLDL, small VLDL, IDL and LDL.

Ten NIDDM patients were studied (HbAIC 6.7; 10.3%; BMI 30–33 kg/m²). They were hypertriglyceridemic (TG 1.8; 3.6 mmol/L). Each patient received a 14 h-intravenously infusion (10.10! mol/kg/h) in fasting state. Large-VLDL, small-VLDL, IDL and LDL were isolated by density gradient ultracentrifugation and apoB100 by SDS-PAGE. The apoB 100 was hydrolyzed and tracer-to-tracee ratio curves were analyzed by compartmental modeling.

Kinetic analysis showed that NIDDM patients had a production rate of 75 ± 50 mg/kg/day and 2.61 ± 1.1 mg/kg/day for large-VLDL and small-VLDL respectively. Fractional catabolic rates (FCRs) of large-VLDL, small-VLDL, IDL and LDL were 0.29 h⁻¹ ± 0.15, 0.44 h⁻¹ ± 0.15, 0.21 h⁻¹ ± 0.02 and 0.025 h⁻¹ ± 0.004 respectively. Direct uptake was in NIDDM patients, 0–81% of large-VLDL metabolic fate.

This study pointed out the heterogeneity of the apoB100 metabolism in NIDDM, mainly from the metabolic fate differences of large-VLDL.

Insulin resistance in Vietnamese subjects with essential arterial hypertension. VH Minh, LC Thanh, PTB Ngoc, TD Trinh, TD Tho, P Valensi (Medical School of Hue and Bach Mai Hospital, Hanoi, Vietnam; Jean Verdier Hospital, 93140 Bondy, France). Several studies suggest that essential arterial hypertension is associated with insulin resistance in obese and non obese subjects. Malnutrition remains frequent in Vietnam and mean body mass index (BMI) in Vietnamese adults is around 18.5 kg/m².

This study aimed to look for an insulin resistance state in Vietnamese subjects with hypertension. One hundred and eight hypertensive patients (51 men and 57 women) over 40 years (mean = 65.4) were compared with 40 healthy subjects (23 men and 17 women) also over 40 years (mean = 61.0). Hypertensive patients had a BMI significantly higher (mean ± SD = 20.4 ± 1.15 kg/m² vs 18.3 ± 2.13 kg/m², P < 0.01), a thicker tricipital skinfold (12.7 ± 6 mm vs 7.0 ± 3.7 mm, P < 0.001), no significant difference in waist/hip ratio (0.88 ± 0.06 vs 0.85 ± 0.06). Blood glucose during fasting and 2 h after 75 g glucose taken orally were similar. Plasma insulin measured during fasting and 2 h after glucose ingestion were significantly higher in hypertensives (44.4 ± 5.1 vs 21.6 ± 3.2 pmol/L, P = 0.026 and 271.1 ± 21.6 vs 139.1 ± 15.2 pmol/L, P = 0.00001). These differences were still significant after excluding subjects with BMI > 22 kg/m².

In conclusion this study shows that healthy Vietnamese adults have a BMI lower than in occidental countries. Hypertension was shown to be associated with a slight but significant increase in: i) BMI which however remains far from the definition of obesity in western countries; ii) fat mass without predominant abdominal adiposity; iii) an insulin resistance state despite the modest overweight.

Influence of dairy protein on cholesterol synthesis in humans. A Avignon, JM Dide-lot, TC Pham, C Colette, B Descamps, L Monnier (Department of Metabolic Diseases, University Hospital, 34000 Montpellier, France).