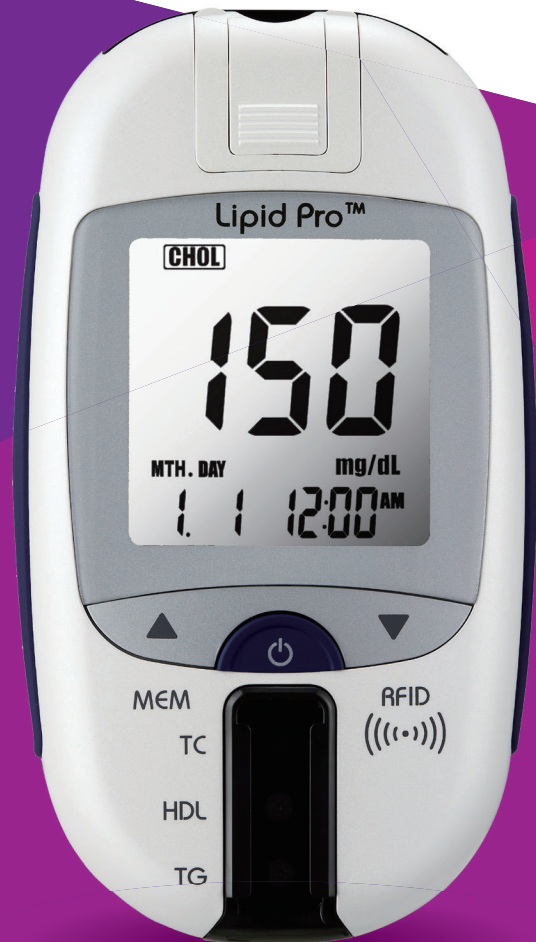


All Lipids (TC/HDL/TG/LDL) and Glucose Testing on One Meter

Lipid^{pro}[®]

Lipid & Glucose Monitoring System



LipidPro[®]

Lipid & Glucose
Monitoring System

Meter Features

RFID

- Instant auto-coding through RFID recognition of test strip packaging by meter
- One-step auto-coding—no installation required

Size

- Perfect palm-size for convenient use and mobility
- Ergonomic grip
- Ideal dimensions compared to other brands

Functions

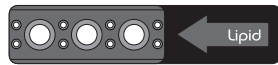
- User-selected glucose and lipid averages, customizable to the day, up to 99-day average
- Unit conversion °F ↔ °C, mg/dl ↔ mmol/L
- Audible reminders
- Large, easy to read LCD
- Low-Density Lipoprotein (LDL) display value generated by unique algorithm
- PC & Printer connection port for easy data transfer



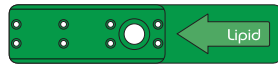
Specifications

Height	109 mm/ 4.29 in	Operating temperature	18 ~ 30 °C (64 ~ 86°F)
Width	61 mm/ 2.40 in	Operating Humidity	10 to 90 % RH
Depth	23 mm / .90 in	Input voltage	DC 1.5V x 2EA (Triple A)
Weight	77g	Tests	Over 1,000 tests
Result Memory	At least 200 tests		

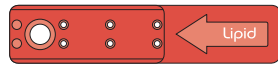
Lipid Pro Strip Features



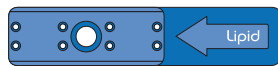
Profile Strip



TG Strip



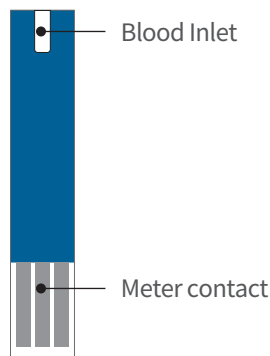
TC Strip



HDL Strip

- Total Cholesterol (TC), Triglycerides (TG), HDL (Choice of multi-strips/single-strips maximizes lipid testing to match user preferences)
- Only 5- μ l blood sample needed to test
- Near central-lab results quality in less than 2 mins.
- Accessory tool captures precise volume for optimal test sample size
- Time-saving multi-strips—simultaneous lipids testing

Glucose Strip Features



- Using GOx-FAD enzyme strips minimizes interference from non-glucose substances
- Strips quickly draw sample into blood inlet by capillary action for an easy fill
- Only tiny 0.3 μ l sample needed for testing
- Germany's IDT (Institute Diabetes for Technology) clinical trials passed
- Consistent stability from premium materials

Specifications	Lipid	Glucose
Measurement Principle	Enzyme chromophoric, Spectroscopy	Glucose Oxidase (GOx), Enzyme oxidation, Electrochemistry
Sample Types	Capillary and Venous whole blood	Capillary whole blood
Specimen	Total Cholesterol, HDL Cholesterol, Triglycerides	Blood Glucose
Range Of Measurement	Total cholesterol: 100~400mg/dl (5.5~22.2 mmol/L) Triglycerides: 70~600mg/dl (3.9~33.3 mmol/L) HDL-cholesterol: 25~80mg/dl (1.4~4.4 mmol/L)	10~600 mg/dL
Measurement Time	2 minutes	3 seconds
Sample Volume	5 μ l	0.3 μ l
Operating Humidity	10~90%	10~90%
Storage Temperature	2~30°C (35~ 86°F) Avoid direct sunlight.	2~30°C (35~ 86°F) Avoid direct sunlight.
Hematocrit Range	30~55%	20~60%
Altitude	<3,048 meters above sea level (10,000ft.)	<3,048 meters above sea level (10,000feet)
Calibration	SRM venous	Plasma Equivalent

Analytic performance of Lipidpro

• Precision*

*Tests were performed with quality control materials

The coefficients of variation(CV) for LipidPro were shown in Table1. The CVs of total precision of TC, TG and HDL-C were 2.8-3.1%, 2.6-2.9% and 2.1-3.2% respectively.

Table1. Precision of total cholesterol, triglyceride and HDL-cholesterol

Items	Level	N	Mean(mg/dL)	SD	CV(%)	
					Within-run	Total
Total Cholesterol	1	15	137.4	3.87	2.3%	2.8%
	2	15	240.5	7.37	2.3%	3.1%
Triglyceride	1	15	110.8	2.87	1.5%	2.6%
	2	15	247.3	7.17	2.5%	2.9%
HDL-Cholesterol	1	15	53.2	1.12	1.9%	2.1%
	2	15	35.1	1.13	2.9%	3.2%

• Linearity*

*Tests were performed with quality control materials

LipidPro revealed good linearities in TC, TG and HDL-C ranging from 123-334mg/dl(R2=0.9983), 133-600mg/dl(R2=0.995) and 25-68mg/dl(R2=0.9976) respectively (Fig.1).

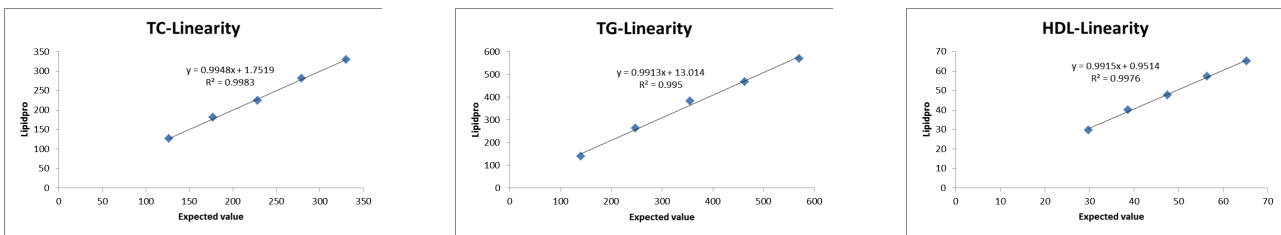


Fig.1. Linearity of total cholesterol, triglyceride and HDL-cholesterol

• Comparison

The correlation of determination(R2) between LipidPro and the laboratory method of TC, TG and HDL-C were 0.9446, 0.9889 and 0.921 respectively (Fig.2).

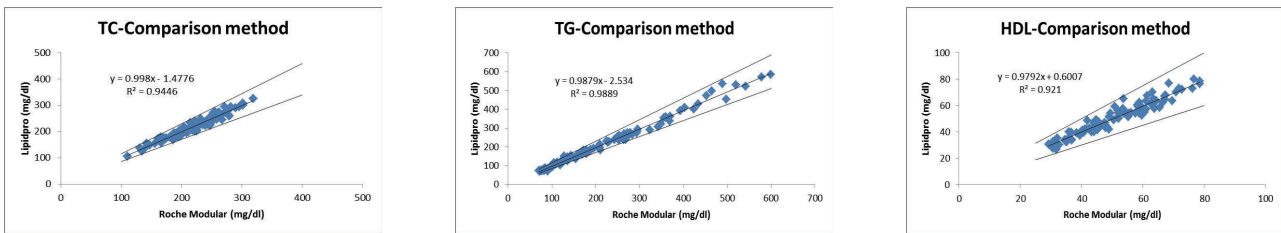


Fig.2. Comparison of total cholesterol, triglyceride and HDL-cholesterol

• Variation of hematocrit

Interference by hematocrit in the range of 30.5-50.4% expected was not significant (Fig.3).

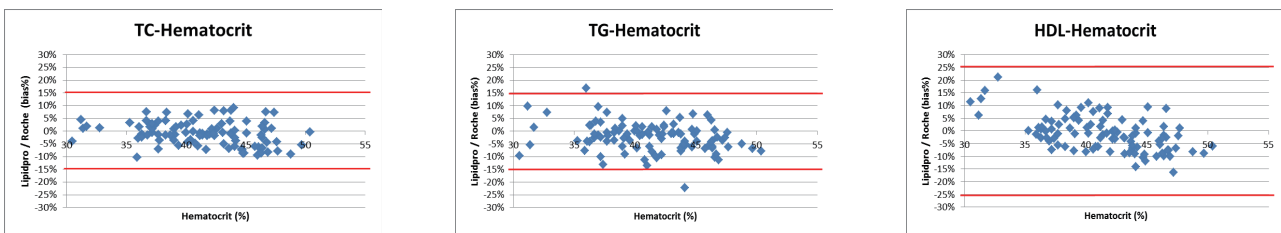


Fig. 3. Effect of hematocrit of total cholesterol, triglyceride and HDL-cholesterol concentration

Clinical trials were conducted in Daejeon St. Mary's Hospital (Korea)