

The WatchWT™ MedGem® Indirect Calorimeter

Provides a guideline-based¹ and patient-centered assessment to your overweight patients with an accurate and reliable measurement of oxygen consumption (VO₂) to determine resting metabolic rate (RMR). A wide variety of health professionals — Physicians, Nurse Practitioners, Physician Assistants, Allied Health Providers (i.e.-Dietitians, Exercise Physiologists, Health Educators), and Research Scientists — all use the MedGem in clinical practice and research settings. The MedGem is:

- **Accurate** - The MedGem has been validated against the “gold standard” Douglas Bag and other commonly used metabolic carts.
- **Simple** - To perform a measurement, your patient simply breathes into the MedGem, which measures their resting oxygen consumption to determine RMR. The results are clearly displayed on the MedGem’s LCD screen.
- **Convenient** - The MedGem is portable, self-calibrates, and easy to administer with existing allied clinical staff. The total measurement time is approximately 7-8 minutes and can easily be performed in the morning, afternoon, or evening.
- **Affordable** - The MedGem is available in two different packages to meet your clinic volume to ensure your practice has the right device to meet your budget needs.
- **Reimbursable** - In the United States, Medicare and most private insurance companies will reimburse for the MedGem procedure (i.e. CPT: 94690) if medically necessary². The reimbursement range for Medicare and private payers is between \$50 to \$100.

²CPT 94690 (Oxygen uptake, expired gas analysis, rest, indirect) is the procedure for the MedGem device. This code is not all inclusive; for a complete list of coding options and descriptions, consult your CPT manual. Microlife Medical Home Solutions, Inc. can not guarantee payer coverage and/or reimbursement of the MedGem procedure.



Looking for a Patient-Centered Program based on your Patient’s Metabolic Needs?.....

WatchWT MedGem is the Answer!

The MedGem provides the personalized health information your patients need to achieve their best results. Current MedGem users agree on the following benefits:

- **Patient acceptance** of the metabolic test is well received as it provides an accurate plan for their weight management goal.²
- **Improved patient outcomes** as patients are more confident in their ability to lose and maintain weight and experience more weight loss.^{3,4}
- **Objective assessment** of a patient’s metabolic needs eliminates the guess work for developing weight management plans.
- **Increased clinic revenue** with an RMR assessment either through reimbursement or cash payments.

WatchWT MedGem vs Other Indirect Calorimeters

Metabolic Systems	N	System RMR	MedGem RMR	Accuracy (%)	Reliability
DeltaTrac VH(5)	50	1551 kcal/day	1552 kcal/day	99.9%	0.94
Douglas Bag(6)	63	1650 kcal/day	1657 kcal/day	99.6%	0.91
Physiodyne(7)	30	1552 kcal/day	1551 kcal/day	99.9%	0.83
Sensormedics 2900 VH(8)	41	1530 kcal/day	1559 kcal/day	98.1%	0.92
Vmax 29N(9)	54	1484 kcal/day	1494 kcal/day	99.3%	na

“The validation study that we performed in our laboratories concluded that the MedGem is a valid and reliable device.”⁶

- David Nieman, Dr. PH, Appalachian State University



"The MedGem can be used to accurately measure oxygen consumption and RMR in capacities where a traditional metabolic cart would not be practical or cost-effective."⁵

~ Cynthia Stewart, M.S., RD, University of Cincinnati Medical Center



Measurement of RMR using the WatchWT MedGem



C. Stewart et al. Comparison of two systems of measuring energy expenditure. *J. Parenter. Enteral Nutr.* 29(3):212-217. 2005.

"The MedGem hand-held indirect calorimeter has potential application in clinical evaluations in which typical metabolic carts or other standard methods are not practical."¹⁰

~ David Fields, PhD, University of Oklahoma, Health Science Center

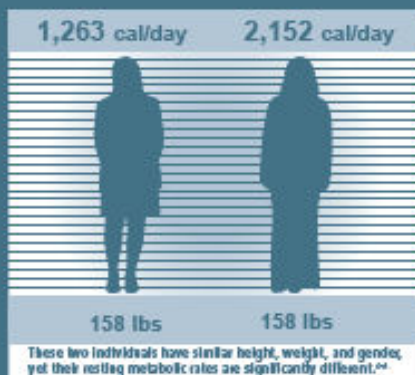
Metabolic Assessment is Guideline-Based

A patient's metabolism is based on the total number of calories burned each day. Metabolism is comprised of normal bodily functions and daily physical activity. Since metabolism is an essential component to weight management, it is important to assess RMR which makes up approximately 70-75% of a patient's daily metabolic needs. RMR is influenced by a number of factors, such as:

<i>Age</i>	<i>Gender</i>
<i>Obesity</i>	<i>Body composition</i>
<i>Hormone levels</i>	<i>Illness or disease</i>
<i>Medications</i>	<i>Genetics</i>

Even patients that are similar to one another (i.e. family members or friends) can have large metabolic differences. These metabolic differences can be up to 900 Kcals/day different as seen in the chart below.¹¹

In addition, a recent review indicates that even the best predictive equation can only accurately estimate to within 10% of measured RMR and approximately 70% in obese patients.¹² As a result, the American Dietetic Association's evidence-based library for adult and pediatric weight management recommends using devices such as the MedGem for determining the most accurate nutritional needs for overweight patients.¹



¹¹ Source: "Resting Energy Expenditure, Body Composition, and Excess Weight in the Obese." Gary D. Foster, et al., *Metabolism*, Vol.37, No.5 (May), 1988, pgs.467-472.

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