

body mass until very old age, when loss of both fat and skeletal muscle occurs. Age-dependent changes also occur at the cellular level. Telomeres shorten, and body cell mass—the fat-free portion of cells—declines steadily with aging.

Between ages 20 and 80, mean energy intake is reduced by up to 1200 kcal/d in men and 800 kcal/d in women. Decreased hunger is a reflection of reduced physical activity and loss of lean body mass, producing lower demand for calories and food intake. Several important age-associated physiologic changes also predispose elderly persons to weight loss, such as declining chemosensory function (smell and taste), reduced efficiency of chewing, slowed gastric emptying, and alterations in the neuroendocrine axis, including changes in levels of leptin, cholecystokinin, neuropeptide Y, and other hormones and peptides. These changes are associated with early satiety and a decline in both appetite and the hedonistic appreciation of food. Collectively, they contribute to the “anorexia of aging.” As noted below, these physiologic changes with aging may be accompanied by social isolation, poverty, and immobility, further contributing to undernutrition.

■ CAUSES OF UNINTENTIONAL WEIGHT LOSS

Most causes of UWL belong to one of four categories: (1) malignant neoplasms, (2) chronic inflammatory or infectious diseases, (3) metabolic disorders (e.g., hyperthyroidism and diabetes), or (4) psychiatric disorders ([Table 47-1](#)). Not infrequently, more than one of these causes can be responsible for UWL. Depending upon patient populations, UWL is caused by malignant disease in a quarter of patients and by organic disease in one-third, with the remainder due to psychiatric disease, medications, or uncertain causes. Risk factors for undiagnosed cancer include a history of smoking, particularly for men, localizing symptoms, and abnormal laboratory tests.

TABLE 47-1 Causes of Involuntary Weight Loss