"*I determined to prevent [illness], by acquainting those that will restrain their appetites, and hearken to reason, with the most effectual rules to preserve health: For certain it is, that from men’s ignorance, or contempt of such rules, thousands never arrive at that period of life which their strength of constitution would have reached with proper care*" (MacKenzie, 1758).

***William Cullen.*** William Cullen (1710-1790) was a physician who later became professor of chemistry in Edinburgh. He is well-known for his classification of diseases. He termed obesity "*polysarcia*," from the Greek for much flesh, placing the condition in his "Order II" of diseases ("Intumescentiae', or swellings"). Cullen proposed treating obesity by creating a saline and acid state of the blood, although Wadd (below) questioned whether such an initiative might have *"worse consequences than the corpulency it was intended to cure, and that no person should hazard these while he may have recourse to the more certain means of abstinence and exercise "* (Wadd, 1816).

***François Boissier de Sauvages***. François Boissier de Sauvages (1706-1767 CE) was a physician and a botanist who served as professor of physiology and pathology at the University of Montpellier, in southern France. He also developed a classification of diseases, listing polysarcia (Young, 1813).

***John Armstrong***. In 1744, the London-based physician and poet John Armstrong (1709-1797 CE) wrote a lengthy poem where he engagingly discussed "*The Art of Preserving Health*." He stated: "*Unless with exercise and manly toil You brace your nerves, and spur the lagging blood. The fat’ning clime let all the sons of ease Avoid; if indolence would wish to live*" (Armstrong, 1744). He contributed material to James Thomsen's the "*Castle of Indolence.*"

***Jean Anthelme Brillat-Savarin***. The Parisian author Anthelme Brillat-Savarin(1755-1826 CE) wrote a notable book on Gastronomy (*Physiologie du goût; “The Physiology of Taste”*). Although a lawyer rather than a physician, Brillat-Savarin distinguished an android from a gynoid distribution of body fat: *"There is one kind of obesity that centres round the belly; I have never noticed it in women: since they are generally made up of softer tissues, no part of their body is spared when obesity attacks them. I call this type of fatness Gastrophoria, and its victims Gastrophores. I myself am in their company; but although I carry around with me a fairly prominent stomach, I still have well-formed lower legs, and calves as sinewy as the muscles of an Arabian steed"* (Brillat-Savarin, 1854).

**Fig. 29.** One of the patients of William Wadd (1776-1829 CE). Source: https://www.google.ca/search?q=William+Wadd

Wadd.tiff

***William Wadd***. William Wadd (1776-1829 CE) was a British surgeon and physician practicing in central London. He unequivocally considered obesity as a disease: *"corpulency may be ranked amongst the diseases arising from original imperfections in the functions of some of the organs, yet it must be admitted also, to be most intimately connected with our habits of life"* (Wadd, 1816)(**Fig. 29**). He wrote scathingly of "*some poor victim, too ponderous to be brought down the staircase*." of a brewmaster who "*became too big to pass up the brewhouse staircase*," of Tunisian maidens fattened for marriage, of a girl who weighed eleven stones (69.5 kg) by the age of eleven, and of a child who was so fat at the age of six that the public were willing to pay a shilling to view her... He sepculated that some of these people might even be at risk of spontaneous combustion. Sometimes obesity also caused fatal difficulties in breathing. Further, he made valuable post-mortem observations on the obese (below).

***William Buchan*** In 1795, the Scottish physician William Buchan (1729-1805 CE) wrote the very successful *"Domestic medicine, or a treatise on the prevention and cure of disease,*" at the modest price of six shillings (Buchan, 1776). A total of 19 editions were published. In this popular work, he stressed the link between healthy eating, body mass and health. He warned*"such girls as lead an indolent life, and eat great quantities of trash, are not only subject to obstructions of the menses, but likewise glandular obstructions; as the scrophula or king’s evil.*" For *"women of a gross or full habit," "a spare thin diet"* was required, with only a small beer to enliven it.

***Robert Thomas***. Robert Thomas, an Enlightenment physician practicing in Salisbury, Wiltshire, wrote "*The Modern Practice of Physic*" (Thomas, 1802). He linked "paralysis" or stroke with a "full plethoric habit." He commented: *"It is found to attack men much more frequently than women, particularly those who have short necks, who are inclinable to corpulency, and who at the same time lead an inactive or sedentary life . . . he should endeavour to counteract any disposition to obesity, which has been considered a predisposing cause."* Robert Thomas described the link between obesity and endometrial cancer; writing of menstrual discharges, he noted "*When they happen to disappear suddenly in women of a full plethoric habit, such persons should be careful to confine themselves to a more spare diet than usual; they should likewise take regular exercise, and keep their body open by a use of some mild laxative . . . Should any scirrhous or cancerous affection of the uterus take place...all that can be done in such a case is to have recourse to palliatives, such as opium, hyoscyamus, and hemlock*."

***Shadrach Ricketson***. In 1806, the Quaker physician Shadrach Ricketson (1768-1839 CE) produced the first American book on hygiene and preventive medicine, entitled *"Means of preserving health and preventing diseases"* (Ricketson, 1806). This text emphasized the hidden acquired diseases and eventual death that resulted from over-eating: "*Let not the drunkard, the epicure, or the voluptuary say, that because he feels no immediate bad effects from his excesses, none are ever to follow: he may be assured, that if he persevere, weakness, disease, and, perhaps death, will, sooner or later, be the inevitable consequence . . . Fullness of blood, and corpulency, are the disagreeable effects of gluttony, which progressively relaxes the stomach, and punishes the offender with headache, fever, pain in the bowels, diarrhoea, and other disorders.*"

**Public attitudes and Enlightenment authors**. The popular denunciation of corpulence was particularly marked in Enlightenment France (Gilman, 2017), where there was a vigorous social critique of those who were judged to be “profiteering” for themselves and “starving” others. This condemnation even had a negative effect upon employment opportunities. Although examples of gross obesity were recorded, among the nobility, authors, actors and even physicians, its prevalence seems to have remained sufficiently low that the public was willing to spend substantial sums at fairgrounds in order to view individuals who were excessively fat.

***Francis Bacon.*** Sir Francis Bacon (1561-1626 CE), the Lord High Chancellor of England, recounts the visit of his father Nicolas Bacon (the Lord Keeper) to his barber, with attendant sleepiness (Bacon, 1803). He *"ordered a window before him to be thrown open. As he was become very corpulent, he presently fell asleep in the current of fresh air,* " Sir Francis developed a theory that strict moderation in diet was necessary to keep *"the vital spirits of a person's intelligence aflame*" (Sanders, 2010).

***de Vauban***. The military engineer and Marshal of France (Sebastian Le Prestre de Vauban, 1633-1707 CE) refused to give appointments to big eaters and fat people (Vigarello, 2013). Such individuals were judged as incapable of good service and not to be trusted with important affairs. This criticism of the bourgeoisie persisted during the Restoration (1815–1830) and the July Monarchy (1830–1848).

***Queen Anne***. The last of the Stuart monarchs, Queen Anne (1665-1714 CE) had 18 pregnancies between 1684 and 1700, with only one child surviving beyond infancy. The “ *seventeen pregnancies – all resulting in miscarriages or young deaths – took a heavy toll”* and her *“anxieties grew in proportion to her corpulence*" (Stubbs, 2017 ). From her mid-thirties, Anne became so obese that she could walk only a short distance without help.

***Ben Jonson***. The English actor and playwright Ben Jonson (1572-1637 CE) was obese, and on one occasion he tried to correct this by walking from London to Edinburgh (Sanders, 2010).

***George Herbert.*** George Herbert (1593-1633 CE) was the Anglican priest of the small parish of Bemerton, in Wiltshire. He translated Luigi Cornaro's "*A treatise of temperance and sobriety.*" advocating a reduction of food consumption as the key to a long and happy life (Sanders, 2010).

***John Dryden***. In the mock heroic satirical poem *Mac Flecknoe*, John Dryden (1631-1700 CE) presented the British poet laureate Thomas Shadwell (1642-1692 CE) as a dull poetaster, a corpulent man with a "*mountain belly*" and a plagiarist (Dryden, 1709 ).

## *William Congreve*. The satirical playwright William Congreve (1670-1729 CE) is said to have been crippled by a combination of gout and obesity, to the point where he could no longer engage in stage management (Gosse, 1888).

***Jonathan Swift.*** The satirist Jonathan Swift (1667-1745 CE) wrote derogatively about the wordiness of a fellow author: *"after this you are presented with a foot- race of mountains and woods, where the woods distance the mountains, that, like corpulent pursy fellows, come puffing and panting a vast way behind them"* (Macbeth, 1876 ).

***Samuel Johnson***. James Boswell described a conversation between himself and the writer Samuel Johnson (1709-1784 CE) on the subject of obesity: BOSWELL: “*I don't know, Sir ; you will see one man fat who eats moderately, and another lean who eats a great deal.”*

JOHNSON: “*Nay, Sir, whatever may be the quantity that a man eats, it is plain that if he is too fat, he has eaten more than he should have done*” (Boswell, 1847).

***David Hume***. The Scottish philosopher, historian and empiricist David Hume (1711-1776 CE)(Fig. 30) was a favorite with duchesses and countesses, but it is said that his corpulence and weakness for port and cheese left him ridiculed by their swains (Finch, 2018). His corpulence was already evident in a portrait by Ramsay dating from 1754, and Diderot also commented on the roundness of his face in a letter from 1769.

**Fig. 30**. David Hume (1711-1776 CE). Source: https://www.google.ca/search?q=David+Hume

Hume.tiff

***David Garrick***. By mid-century, like other London celebrities, the actor and theatre impressario David Garrick (1717-1779 CE) was euphemistically using Hogarth's "Line of Beauty" to describe his own corpulence (Goggin and Hassler-Forest, 2010).

***Niccolò Jommelli***. The Italian musician NiccolòJommelli (1714-1774 CE)(Fig. 31) retired to his native Aversa, and is said to have spent there his "*opulent corpulence*" (Durant and Durant, 2011).

**Fig. 31**. Niccolò Jommelli. (1714-1774 CE). Source: https://en.wikipedia.org/wiki/Niccol%C3%B2\_Jommelli

Jommelli.tiff

***James Thomsen*.** The Scottish 18th century poet James Thomsen, author of the "*Castle of Indolence*" was a bulky man. Whether his bulkiness was the result of indolence, or indolence resulted from his corpulence, it matters not; but at any rate it seems that Thomson was rather lazy. Lyttleton described him as "more fat than bard" (Hawick Archaeological Society, 1863).

***Lord Byron***. George Gordon Byron (1788-1824 CE) called obesity "*an oily dropsy*." He himself seems to have been a weight cycler, with his body mass swinging between 60 and 89 kg over his adult life. Occasionally, he would eat huge meals and then purge himself or engage in violent bouts of exercise (Baron, 1997). In 1811, Byron bought a copy of Wadd's book on corpulence.

Byron is famous for his promotion of a vinegar diet (Bijlefeld and Zoumbaris, 2014). Reports of his nutritional advice range from “*Drink some vinegar with meals*” to “*Drink some vinegar as your meal,*” with associated claims about how vinegar could help with weight loss. At one point, Byron ate only potatoes dipped in vinegar, with some disastrously unpleasant side effects. He also tried programmes that involved obsessively weighing himself, of subsisting on biscuits and soda water, and of wearing heavy clothes to induce excess sweating. Moreover, he advocated these dangerous lifestyles to his wealthy friends.

**Anatomical study of obesity**. The Restoration and enlightenment saw the first anatomical dissections of obese individuals by Bonet, Morgagni, Haller, Wadd and Haller.

Bonet.tiff

**Fig. 32**. Théophile Bonet performed the first post-mortems on the pathologically obese. Source: http://hardluckasthma.blogspot.ca/2011/11/brief-history-of-copd.html

***Théophile Bonet***. Théophile Bonet (1620-1689 CE) (**Fig. 32**), a Geneva-based physician (Bonet and Manget, 1679) described the post-mortem findings on obese individuals in his text "*Sepulchretum, sive anatomia practica, ex cadaveribus morbo denatis, proponens historias omnium humani corporis affectuum" ("Practical anatomy from dead bodies relative to all conditions affecting the human body")*(Bonet and Manget, 1679).This mongraph included the accumulated findings from some 3000 autopsies performed by Bonet and his contemporaries, including Harvey's report on Thomas Parr, a man who was alleged to have died at the age of 152 years (Shephard, 2015).

Bonet's insights into the pathological anatomy of many clinical conditions are widely acknowledged to have laid the groundwork for studies by the Italian pathological anatomist Giambaptista Morgagni (below).

***Giambaptista Battista Morgagni***. In 1765, Giambaptista Battista Morgagni (1682-1771 CE) gave some extended case descriptions of patients with severe obesity. He recognized that the accumulation of substantial amounts of fat was linked to an increased risk of disease, and by anatomical dissection he demonstrated that the location of this fat was a crucial issue. In his *Epistola anatoma clinica XXI*, he describes one female with severe abdominal obesity ("*virili aspectu"* – a manly, distribution). "*The limbs were not lean, but they did not correspond in fatness with the extreme obesity of the abdomen and thorax*." *"Her abdomen was prominent, and a large amount of fat had accumulated. Her abdomen was prominent, and a large amount of fat had accumulated in the intra-abdominal spaces and at the mediastinal level, with a raised diaphragm*" (Morgagni, 1761).

**Fig. 33.** Frontispiece to Wadd's book "Comments on corpulence: Lineaments of leanness."

Wadd.tiff

Morgagni also commented on a hardening of the arteries in the post-mortem examination of a severely obese male.

***William Wadd***. William Wadd (1776-1829 CE) was a British doctor practicing in London, who was appointed as Surgeon-extraordinary to King George IV. Wadd became celebrated for his *Cursory Remarks on Corpulence or Obesity Considered as a Disease* (**Fig. 33**) (Wadd, 1816)**,** a publication that went to four editions. The text included a graphic description of one post-mortem examination: *”The heart itself was a mass of fat. The omentum was a thick fat apron. The whole of the intestinal canal was embedded in fat, as if melted tallow had been poured into the cavity of the abdomen...So great was the mechanical obstruction to the functions of an organ essential to life, that the wonder is, not that he should die, but that he should live.”*

In a second book entitled "*Comments on corpulence: Lineaments of leanness*" (Wadd, 1829), Wadd presented details on 12 cases of obesity; two had been examined at post-mortem, and their bodies were found to contain enormous accumulations of fat. On microscopic examination: *"The first striking appearance was the degree to which the cellular membrane was loaded with fat."* In our present context, perhaps the most interesting of Wadd's cases was a "*Fat sportsman."* This particular patient claimed to have gone through great exertion every morning, but to have rewarded this virtue by eating, drinking and sleeping throughout the afternoon. The morning's exertions waned as obesity began to impede his movements, and the "*sportsman's*" weight at examination was 121 kg. Another case of gross obesity had been referred to Wadd by a country practitioner; with a height of only 1.52 m, but an initial body mass of 146 kg, this person had a BMI of 63.2 kg/m2.

***Albrecht Haller***. Albrecht Haller 1708-1777 CE), the Swiss anatomist and physiologist, is himself reported to have suffered from obesity associated with bipolar disorder (Kretschmner, 1948); in later life he became addicted to opium. He provides further post-mortem descriptions of obesity in his book *Elementa physiologiae corporis humani (Physiological elements of the human body)*(Haller, 1757). He linked obesity to gastric disorders: "*Among the diseases which are discovered by frequent dissections, I have found some very terrible ones of the stomach, of which I shall give a concise account*" (Haller, 1756),

**Fig. 34**. Santorio Santorio (1531-1636 CE) studied energy balance by spending much of his time in a chair where he could weigh changes in body mass with ingestion of food and excretion. Source: https://www.google.ca/search?q=Santorio+Santorio

Santorio.tiff

**Studies in energy balance**. The Venetian physiologist Santorio Santorio (1531-1636 CE) was an interesting if somewhat eccentric character from the early part of this era. He added to our understanding of metabolic balance by constructing a weighing chair on which he sat for much of the day, recording changes in his body mass relative to his food intake and excretory losses (**Fig. 34**). He noted that for every eight pounds of food that he ate, only 3 pounds of waste were excreted, with at least a part of the difference in the two weights being due to insensible perspiration (Eknoyan, 1999).

***Conclusions****.* By the end of the Enlightenment, gross obesity was still sufficiently rare as to prove a fair-ground attraction. At the same time, there was public disapproval, satire, and in some cases denial of employment to those who were fat. Nevertheless, a growing number of wealthy people, including physicians, authors and actors, showed substantial accumulations of body fat. Physicians still had a limited knowledge base, although their understanding of obesity was now helped by post-mortem studies of the grossly obese. A growing number of complications were recognized, and moderation in diet and regular exercise remained the most common recommendations to affected individuals.

**The Victorian era**

**Quantification of obesity**. At the beginning of the Victorian era, there were many shady insurance companies, and little understanding of weight for height norms even by the more reliable concerns. Charles Dickens featured an unscrupulous company (the "*Anglo-Bengalee Disinterested Loan and Life Assurance Company"* in his novel "*The Life and Adventures of Martin Chuzzlewit."* However, attempts to quantify an individual's excess weight in ways that were appropriate to clinical and pathological practice developed in Victorian times, with Adolphe Quételet, John Hutchinson, Cesare Lombroso, and Louis Dublin leading in this research.

**Fig. 35.** Adolphe Quételet (1796-1874 CE) was a Belgian statistician who developed early weight for height tables. Source: https://en.wikipedia.org/wiki/Adolphe\_Quetelet

Quetelet.tiff

***Adolphe Quételet***. Adolphe Quételet (1796-1874 CE)(**Fig. 35**) was a Belgian statistician who founded and directed the Brussels observatory. In our present context, he developed the concept of the "*average man*" characterized by the mean of height and weight values that follow a statistically normal distribution, and he argued that the normal variation in anthropometric characteristics provided one basis for the operation of natural selection (Quetelet, 1835).

Quetelet suggested that a person's weight divided by the square of his or her height provided a measure of fatness that corrected for inter-individual differences in height. This measure, although now termed the Body Mass Index (BMI) in North America, is still recognized as the 'Quételet Index' (QI) in some European countries.

***John Hutchinson*** John Hutchinson (1811-1861 CE) is perhaps best known as inventor of the clinical spirometer. In 1836, he was appointed as physician to the Britannia Life Assurance Society, and in this role he developed a keen interest in relationships between body mass and life expectancy (Spriggs, 1977). His published an early population survey of vital capacity, height and body mass, based on a relatively representative sample of British society(Hutchinson, 1846)**.**

***Cesare Lombroso*.** In Italy, the criminologist Cesare Lombroso (1835-1909 CE) accumulated statistics on the height and body mass of a large sample of the Italian population ("*Sulla statura degli Italiani*" 1873), and he used this data in his attempt to substantiate the hypothesis that prostitutes and other criminals were more obese than their honest peers (below).

***Louis Dublin*.** Louis Dublin (1882–1969 CE), a statistician and vice president of the Metropolitan Life Insurance Company in New York, built on this earlier work to develop tables of normal weights, based on the average weight for a given height reported by American applicants for life insurance (Eknoyan, 2008).

**Medical attitude*s*.** Efforts to provide appropriate clinical care for the fat person were intensified during the Victorian era, often with recommendations to suppplement exercise and dietary restrictions by physical constraints such as belts and corsets. Many doctors began to apply the new understanding of physiology to rational forms of treatment, although surprisingly the lead was taken by an undertaker named William Banting, who proposed what was essentially a forerunner of the Atkins diet.

**Fig. 36**. A case for William Banting. Source: https://www.google.ca/search?q=William+Banting

Banting.tiff

***William Banting***. William Banting (1798- 1878 CE) was a notable British undertaker of the period (**Fig. 36**). He was initially very obese himself, and knew of the breathlessness that this obesity caused. He also described associated joint pains, often described by his medical contemporaries as "gout." The co-morbidity of deafness led him to consult the surgeon William Harvey, who identified Banting's hearing loss as arising from the fat around his neck compressing the airways. Banting became slim through adherence to a low carbohydrate diet, as prescribed by Harvey, and he wrote the first commercially available diet programme, a low *"farinaceous"* diet that was the forerunner to the Atkins diet (Banting, 1964). An article in the London *Daily Telegraph* recounts his story: *"On the August morning that he began his diet, 26 years into the reign of Queen Victoria, the short and very fat William Banting heaved himself out of bed at 8 a.m., hoisted a corset around his bulging stomach and struggled into his three-piece suit. Unable to reach his laces, he gingerly eased his feet into his shoes with a boot-hook - taking care as he stooped not to stress the angry boils on his buttocks. As he negotiated the stairs in reverse (a method, he found, that eased the crushing pressure on his knees), he was looking forward to the cooked breakfast awaiting in the dining room below - but dreading the effect it would have on his ever-ballooning bulk. Twelve months later, the 5ft 5in Mr Banting had shed more than three stone, to be a slightly portly 11 stone"* (Edwardes, 2003 ). Finally, Banting believed that he had reached "*the standard natural at my age (10 stone 10 or 150 lbs), as my weight now varies only to extent of one lb, more or less, in the course of a month. According to Dr.Hutchinson's tables, I ought to lose still more, but cannot do so without resorting to medicine.*"  
 Banting’s name entered into the popular culture of his day, beloved of Mr Punch, and even becoming the subject of a theatrical comedy and music hall songs (Haslam and Rigby, 2010).

***William Harvey***. William Harvey was the Ear, Nose and Throat surgeon who advised Banting; he praises the Banting method of weight reduction in his book: "*On corpulence in relation to disease with some remarks on diet*" {Harvey, 1872). Harvey regretted that people viewed obesity as a curiosity, rather than as a condition requiring treatment: *"Corpulence is an abnormal body condition that has been ... observed and described, mainly as being a curious phenomenon; ...nobody had studied this constitution with the inconveniences, the accidents, the infirmities and the diseases which it produces or maintains."*

***Julian Watson Bradshaw*.** The English naval surgeon Julian Watson Bradshaw (1824-1907 CE) offered many insights into Victorian medical practice. In his pamphlet "*On Corpulence*" (Bradshaw, 1864) he wrote: *"to carry a certain amount of flesh, as it is termed, is by many considered not necessarily a standard of beauty, but an indication of health. This is a grave mistake. Augmentation of fatty tissues leads to very alarming results." "fat to an immoderate extent...is a disease." "the diaphragm cannot act with natural ease and the heart may lose its power." "more can be done by diminishing the quantity of food than by any other method.*"

***Wilhelm Ebstein***. Wilhelm Ebstein (1836-1912 CE) discussed a rational physiological basis for the treatment of obesity in an address to the Lower Saxon Medical Association (Ebstein, 2015). He was initially critical of Banting's ideas on diet, suggesting that such a regimen led to inanition, but he later became a strong supporter of the a high fat, low carbohydrate diet, contending that albuminous and fatty matter checked the deposition of fat in the body.

***Max Joseph Oertel.***  MaxJoseph Oertel (1835-1897) was a physician who operated a sanatorium in Munich. He advocated a diet of lean beef, veal or mutton and eggs in the treatment of obesity. He was also a proponent of the terrain cure(Oertel, 1886), arguing the need to strengthen the weakened muscular substance of the heart by a limitation of the amount of fluid in food and drink, and by graduated exercise for the muscles. Spa trails were marked in numbers and colors on a scale of increasing difficulty, depending on their length and slope. The 244 pound Prince Otto von Bismark responded to this regimen by the loss of 60 pounds over the course of a year.

Figuroids.tiffFig. 37. Advertisement for the slimming preparation "Figuroids" from the Windsor magazine of 1908., an illustrated magazine for men and women. Note the progressive decrease in dimensions of the woman.

***William Osler.*** Sir William Osler (1849-1919 CE)– the Canadian physician who became one of the four founding fathers of Johns Hopkins Hospital, saw over-eating and a lack of exercise as dominant causes of obesity. In the 1882 monograph “*Obesity and its Treatment*” Osler wrote:*"With few exceptions, persons over forty eat too much."* He recommended treatment with a diet that was low in refined carbohydrate, and where meat and eggs predominated (Osler, 1892); he insisted that fatty foods were crucial in counteracting obesity, because they increased feelings of satiety.

***Harvey Cushing***. Shortly before his retirement, the brain surgeon Harvey Cushing (1869-1939 CE) developed an interest in the neuro-endocrinology of obesity, with a particular focus upon Cushing' s syndrome (Bray, 1994).

**Quack Remedies.** The prosperity of the Victorian middle class and growing opportunities for popular advertizing allowed a wide range of unscrupulous quacks, commercial organizations and even less well-informed doctors to offer an arsenal of quack remedies supposed to correct obesity and fortify the flesh. Many had catchy names, such as Figuroids, Gordon's Elegant Pills, Bile Beans, Corpulean and Slim.

As examples, we will comment briefly on several "slimming" pills, deliberate tapeworm infection, prolonged mastication of food, temperate food choices, magnetic and electroconvulsive therapy, hydrotherapy, spa treatment, acupunture and homeopathy. Many of the drugs that were marketed contained substantial quantities of laxatives, and were relatively harmless although ineffective. Others were quite dangerous to health. Dinitrophenol raised body temperature and sometimes caused blindness, and although thyroid extract increased metabolic rate, it could cause heart problems.

**Fig. 38.** Advertisement for a "sanitized" tapeworms. Tapeworms.tiff

Source: https://www.google.ca/search?q=William+Banting

***Figuroids***. The advertisement for Figuroids (**Fig. 37**) promises "*If you are like the STOUT girl—you will become like the MEDIUM girl—and finally like the DAINTY girl—by taking Figuroids."*  Release of this advertisement in various magazines and newspapers coincided with the 1908 introduction of the sheath dress (Rance, 2013). An analysis of the pills by the British Medical Association found them to consist of bicarbonate of soda, tartaric acid, sodium hexamethylinetetramine, talc and gum, none of which would have had any effect on obesity.

### *F.C. Russell's Cure*. A self-published book by F.C. Russell, a London Chemist (Russell, 1894), made extravagant claims , supposedly based upon the reports of users, concerning the weight losses achieved by his regimen. This was said to include a "*purely vegetable*" treatment, with no noxious drugs and no drastic dietary restrictions.

***Dr. Grey's Fat Reducing Pills.*** A magazine advertisement from1894 offered Dr.Grey's fat-reducing pills. These apparently contained a substantial amount of sulphur (Corless, 2011), and were said to be an "*Absolutely safe, permanent and rapid cure for obesity. A special preparation for hunting men, jockeys, and stubborn cases (either sex) which have resisted other treatment. Abdominal obesity a speciality .... plain wrapper, post free to any part of the world*."

***Trilene Tablets****.* Trilene tablets contained small amounts of seaweed and starch, but in order to appeal to those with a sweet tooth their main constituent was sugar (Corless, 2011).Quotes from satisfied customers included Mr. Gillespie of Forest Gate: *"I have just lost 3 stone,"* and Mr. William Usher: *"A sister of mine, who was 17 stone, was greatly reduced by your Tablets to 15 stone."*

***The Tapeworm Diet***. The tapeworm treatment involved ingesting a pill that contained a beef tapeworm egg (**Fig. 38**). Once hatched, the parasite grew in the gut, consuming a part of whatever food the individual ate, and thus (in theory) it brought about weight loss without the patient worrying about the amount of food