

Chapter 4

Metaphors and Risk Cognition in the Discourse on Food-Borne Diseases

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Abstract The aim of this contribution is to discuss the most important issues connected with communicating food-borne diseases. The investigation focuses on the role of symbolic language in informing stakeholders about food-borne crisis situations. To narrow the scope of the research, the study concentrates on metaphors and their role in risk cognition, especially in the face of information overload. This approach allows the author to study the metaphorical dimension of risk cognition as well as its dynamics connected with the necessity of a constant response to changing internal and external conditions. Theoretical investigations on metaphors in food, health and risk discourse are often supported by empirical analyses on the use of metaphors in communicating food-borne diseases. This study encompasses selected materials on food-borne diseases gathered from Italian online sources and covers the corpus of investigated verbal metaphors. The aim of this chapter is to show whether metaphors strengthen or weaken risk cognition, and how far they determine the risk communication of food-borne diseases.

4.1 Introduction

Modern times can be characterized by the influence of networks, information load, and various risks that determine their current shape. First of all, the reality of the twenty-first century can be examined from the perspective of a network society that can be defined as a *society whose social structure is made of networks powered by*

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microelectronics-based information and communication technologies [1]. Moreover, both private and business spheres are determined by complex grids and lattices responsible for the contacts among human beings, as well as their relations with other entities [2]. Since nowadays there are fewer and fewer time or space barriers, distances of a geographical, political and cultural nature are becoming less and less visible [3]. Moreover, this borderlessness can be observed at both group and individual levels since companies are a part of the fluid reality [4] and, at the same time, individuals possess hybrid identities [5] that undergo changes, responding to alternations in their environment.

Secondly, the growing popularity of social media, the Internet and email correspondence makes many people suffer from *information overload* that takes place when the quantity of information is excessive [6, 7] or disruptive, owing to the vast number of impulses offered by various information sources that continuously require recipients' attention [8]. As a consequence, individuals may not understand some data, may have problems in judging whether the piece of news is reliable or may doubt that such information exists [9]. Since information overload is also connected with the necessity to select the required parts of information among the multitude of offered resources, it is important to use linguistic devices that enhance and foster data selection and comprehension. In addition, the price of information does not depend on its cost but on its value [10] and, consequently, linguistic tools are often used to enhance the merit of available data or make them more valuable in comparison with similar pieces of information.

The third element determining the performance of modern organizations and individuals is risk. Although it is said that people have to deal with the overproduction of risks in the modern reality [11], it should be mentioned that the twenty-first century is not more dangerous than the past epochs, but what has changed in our society is the level of knowledge and awareness of risks [12]. Consequently, in the economics of the third wave, workers that are needed should be thinking, critical, creative and ready to take risks [13]. Although there are various hazards present in modern reality, the risks that bother both individuals and organizations are those related to health. As Sontag [14] states, "*illness is the night-side of life, a more onerous citizenship. Everyone who is born holds dual citizenship, in the kingdom of the well and in the kingdom of the sick. Although we all prefer to use only the good passport, sooner or later each of us is obliged, at least for a spell, to identify ourselves as citizens of that other place*". Thus, a disease is a part of one's existence and determines it to a smaller or greater extent. Although in most sources diseases are pictured in a negative way, illnesses are not only one's enemy but they can also be perceived as a friend since they show what one's organism lacks and what should be done to become healthy again [15]. Since diseases are one of the aspects shaping one's identity [16] and estimating risks raised by experts is a part of identity creation, built on response and condition [17], food-borne diseases studied from a discursive perspective may offer an interesting discussion on modern identity in risky environments.

4.2 Food-Borne Diseases from the Risk Perspective

Food-borne diseases are caused by the consumption of contaminated foods or beverages. Although there have been significant improvements in food safety, including the pasteurization of milk, safe canning and disinfection of water, food-borne poisoning still causes health problems for consumers [18]. Consequently, dealing with food-borne diseases continues to be of great importance, and such issues as food preparation, food storage and hygiene are frequent topics of scientific discussion [19]. It should be added that although the home environment is associated by most people with safety, security and relaxation, it is also a potent locus of possible infection, as food-borne diseases are often caused by poor hygiene in home kitchens and improper food preparation by consumers at home [20]. Domestic kitchens are also the place where consumers tend to take decisions on healthy nutrition since a person preparing food at home may face the risks of serving food with preservatives or offering potentially spoiled food, as a result of problems with storage [21].

As far as hazard typology is concerned, food-borne diseases follow similar risk characteristics to SARS (Severe Acute Respiratory Syndrome) or avian influenza. They can be characterized as *unknown risks* since (at least in the initial stages) virus origins and infection processes are often undetected. They additionally constitute *dread risks* since infections may be fatal, affect many people and remain untreated because no effective medication is available at a pandemic outbreak [22]. A substantial problem concerning food-borne illness is the issue of under-reporting. Even if seen by a doctor, the patients' stool samples are not taken and analyzed very quickly. Thus, it becomes very difficult to estimate the real number of people who suffer or have suffered from a particular disease, and reported cases constitute less than 10 % of all those infected [23]. Further aspects of risk communication related to the food industry are the credibility of information sources [24] and proper communicative strategies.

4.3 Communicating Food-Borne Diseases

Food-borne disease, together with food irradiation [25], genetically modified food [26], food recall [27], food contamination [28], food allergies [29] and food safety regulations [30] belong to very popular topics in communication on food risks.

It should be underlined that the perception of risks related to food-borne diseases is connected with different social notions. According to the *Health Belief Model*, the perception of threat is determined by such factors as age, gender, ethnicity, experience, education, knowledge and socio-economic status [31]. In addition, individuals are likely to take preventive actions if several determinants may be observed. They are as follows. *Perceived susceptibility* is when someone feels likely to suffer from a disease. *Perceived severity*, on the other hand, concerns an

opinion that a disease is connected with serious effects on health. The third issue, *perceived benefits*, reflects a potential beneficial aspect of preventive actions. To add, preventive behavior is likely to take place when some benefits of health-oriented attitudes outweigh various expenses related to them [32]. Moreover, cultural differences shape the perception of illnesses. For example, some nations are more likely to view illnesses as more risky than other ones. In addition, individuals vary in attitude towards the credibility of information on risks provided online [33]. Moreover, geographical factors are important in risk perception. For example, people in New Zealand may estimate that their geographical location makes them less likely to become exposed to some diseases. It has been proved, however, that a geographical locus does not protect from diseases since e.g. H1N1 came to New Zealand in 2009 together with some returning participants of a school trip to Mexico and the USA [34]. Thus, information on a geographical scope of food risk situations determines its perception. In addition, when food poisoning has been detected in a distant country, a disease itself may be perceived as less risky for those located far away from a pandemic outbreak. The same applies to a victim group. For example, if a virus is supposed to attack a certain age group, representatives of other generations may feel safer. Furthermore, as [35] state, taking the optimistic bias effects into account, people underestimate food risk. As a consequence, individuals may think they are less prone to risks than other people. Moreover, risk cognition depends on such factors as an individual's world view, moods, emotions and immediate stimuli [36]. Thus, one's bad humor or stress related to other situations may result in an improper risk estimation. Moreover, people judge a disease as more risky if it is likely to cause serious health outcomes [37]. The following factors determine the perception of risk: an expected number of fatalities or losses, possible catastrophic potential, perceived properties of risk sources or risk situations and beliefs connected with risk determinants [38]. For example, applying a positive frame by showing a number of people saved makes individuals more likely to select health programs for combating diseases [39].

The aims of risk communication are as follows. First of all, its intention is to enhance the understanding of risks among different stakeholders. The second goal is to alter individuals' ordinary behaviors with the aim of reducing health hazards. The third issue concerns an increase of trust and credibility of institutions responsible for dealing with risks. The fourth aim concerns enhancing dialogue and solving conflicts [40]. Another issue important in risk communication is called *disaster fatigue* and it concerns situations when the general public is faced with information on different diseases [41]. Taking into account the multitude of data on health-related risks in the media, the aim of information creators is to use such linguistic resources to communicate food-borne diseases that draw stakeholders' attention to important issues. Their proper selection is important since the way food-borne diseases are pictured shapes an attitude towards them. For example, the events that are quickly perceived in one's mind are rated as more probable than the ones that require more effort as far as perception and comprehension are concerned [38]. To continue the discussion on comprehensibility of information on food-borne disease, it should be mentioned that proper representation makes unknown or novel

scientific concepts understandable by diversified stakeholders [42]. Taking into account the linguistic dimension of risk communication, selected linguistic tools transform scientific information into the content that would be easily understood by the general public [43]. For example, humorous graphic images may be very helpful. Another important issue is a context itself [44]. What is more, a text is supposed to be simple, sentences should be short and coordinate sentences, together with very technical terms, should be avoided [45]. Moreover, such adjectives and adverbs as *highly*, *excessive*, *dramatically* or *extremely* stimulate the perception of risk. The same applies to such phrases as *well established*, *widely agreed upon*, and *widely acknowledged* that possess the idea of expertness in them, and consequently, make the reader believe in such statements [46]. Furthermore, numerical information may also increase or decrease risks in the eyes of readers, taking into account numbers themselves as well as individuals' attitude towards a figure. Moreover, one's previous experience and cognition determine the attitude to diseases. Schemas, being a set of ideas connected with cognitive structures employed in ordering, presenting, evaluating and using knowledge, are important in organizational settings since they help understand the behaviors of others, predict them and respond to them in an efficient way [47]. Since *the projection of image schemas onto abstract thought is mediated mainly by metaphor* and moreover *metaphor constitutes a crucial link between bodily experience and abstract reason* [48], in the following sections metaphors will be given a more detailed study.

4.4 Metaphors

Metaphors can be defined as *mappings from one conceptual domain to another* [49]. There are various ways of researching metaphors. As far as the metaphors presented in this chapter are concerned, the eco-linguistic theory of metaphor by Döring and Nerlich [50] is taken into account. It encompasses approaches from the Cognitive Theory of Metaphor, the Interaction Theory of Metaphor, Blumenberg's (1960) historical study of metaphor (Metaphorologie), and the Textual Theory of Metaphor. The intersection of all these approaches makes it possible to study metaphors in various ways. As Döring and Nerlich underline, especially the theories of Weinrich and Blumenberg and the concept of *image fields* are useful for the discussion on metaphors: *image fields are the product of experiential and synergetic processes between an organism and an environment, the outcome of an active and ongoing engagement within environments* [51]. In addition, the ecolinguistic point of view shows languages not as fixed structures, *but as open systems and repositories of accumulated social and cultural experience* [51]. In the case of this research, metaphors are dynamic phenomena that adjust to the needs of those who rely on them in some socio-natural and cultural contexts [51].

As far as the functionality of metaphors in discourse is concerned, they are useful in discussing novel or difficult concepts since they rely on symbols that are well-known and recognized by people [52–54]. Thus, metaphors help disseminate

scientific and medical knowledge among non-specialists [55]. Moreover, since metaphors make complicated issues more comprehensible [56, 57] and limit the fear of change [58], they can be useful in the discussion on food risks. Moreover, *metaphors do not answer questions, they rather pose new questions* [59]. Consequently, they have ambiguity [60] and some mystery [61] in themselves, they offer various interpretations [62] and perspectives [63], and, thus, they shape the way people perceive the reality [64].

Individuals used myths, metaphors and rituals to communicate information related to risks even in the ancient times [65]. Taking into account the modern usage of figurative linguistic tools, risks can be perceived in a metaphorical way since when one mentions risks, it means that people should avoid something or at least be careful about something [66]. In this case, taking into account such features as metaphorical attractiveness for readers and their ability to draw attention [67, 68] more easily than other linguistic devices, metaphors prove to be an efficient tool in risk communication. One way is to look at risks through the perspective of *Pending Danger* (Damocles' Sword) that is characterized by the artificiality of risk source, visible catastrophic potentiality and the threat of randomness as far as victims are concerned. The next perspective is the one called *Slow Killers* (Pandora's Box) that entail artificial elements in food, water or air that have delayed effects on one's health; they are determined by information coverage and are easy to blame. The third one can be named *Cost-Benefit Ratio* (Athena's Scale) and it is strictly related to monetary gains and losses, characterized by an asymmetry between risks and gains, directed at a variance of distribution and dominated by probabilistic thinking. The fourth element, *Avocational Thrill* (Hercules' Image), stresses individual's control over the degree of risk and individual skills determining the comprehension of danger, involving voluntary activity and having non-catastrophic consequences [38].

There are certain areas that are often described through metaphors. One of them is GMO (Genetically modified food). For example, food biotechnology is presented as Frankenfood [26, 69] or by using the figure of Frankenstein directly, e.g. *Frankenstein sul piatto o panacea per sfamare i poveri del pianeta?*¹ [70]. The next scientific topic that relies on metaphors in communication is the discussion on food-borne diseases.

4.5 Metaphors and Food-Borne Diseases

Metaphors and visual imagery belong to the most important ways of conceptualizing illnesses and diseases [71]. As far as the role of using metaphors in discussing illnesses is concerned, there are two issues that are raised in scientific investigations. Some scientists claim that metaphors help people deal with difficult

¹ Frankenstein on the plate or the panacea to feed the poor of the planet (translated by the current author).

situations, including illnesses. For example, in the face of life-threatening disease, people often perceive them in terms of a battle, with an illness being an enemy that must be destroyed [72]. In consequence, an illness is viewed as something that can be overcome by patients, an adversary that can be defeated. In contrast, some state that such a metaphorical representation may lead to a wrong perception of real dangers since using military metaphors and perceiving illnesses in terms of heroic fight may lead to the false assumptions on their real hazard [73]. Thus, in the next part of this paper an attempt is made to discuss how metaphors determine the perception and cognition of risks related to food-borne diseases. The reasons for the selection of the topic are as follows. First of all, food-borne disease receive extensive media coverage. Secondly, metaphors do not only represent how journalists view the reality, but they also create the reality and shape one's perception and reaction to information [74]. Thus, the role of mass media in communicating food-borne diseases is very important since the way one uses metaphors may lead to political, social, and economic consequences [75].

It should also be stated that the research on communicating food-borne disease is characterized by high dynamism; since one single risk may alter the perception of other risks [11], the representation of food-borne disease is determined by other health-related hazards. Moreover, the selection of metaphors depends on the stage of disease spread. During an outbreak, both a war metaphor and a journey metaphor are popular, whereas the second stage is described by a metaphor of control, supernatural force and a global network frame [76]. Since warfare belongs to one of the most popular domains used in metaphors [77, 78] and allows us to describe such phenomena as competitiveness, frightening for stakeholders, a metaphor of war constitutes one of the most popular ways of understanding diseases [79, 80]. A domain of war is also used in a discussion on food-borne diseases. For example, a foot-and-mouth disease is symbolized by applying the metaphors of fighting, journey or race [55]. Moreover, a metaphor of war may be used to stress simultaneously diseases and those fighting with diseases, both attackers and victims. For example, governments may be presented as the ones attacking diseases and successful in combat [76].

A metaphor of machine is also used in medicine [81]. For example, a healthy person is pictured as a properly functioning machine, whereas a disease is portrayed through the motif of machine failures [80]. In addition, the most often used metaphors to depict diseases stem from natural forces of air, earth, fire and water. Thus, viruses are often characterized as earthquakes, floods or storms [82]. Diseases can also be perceived by means of a road metaphor [83]. Additionally, a journey metaphor is also used in the discourse on health problems since a disease may be portrayed as a physical entity heading towards a goal [76], with infecting a person being the main aim. Disease may also be described by animal metaphors. For example, a virus is a greyhound reflects the conceptual metaphor of a race [82].

4.6 Metaphors of Food-Borne Diseases—Research

The aim of the research is to pay attention to various metaphors used in the discourse on food-borne diseases in Italy. Thus, the author has investigated the articles published in the online versions of Italian daily newspapers as well as at special portals and websites devoted to food handling. As far as the methodology is concerned, the Internet search engines of mentioned information services have been used. After the examination of over 30 articles on food-borne disease published in various online sources (see Appendix), several metaphorical domains have been identified that are popular in discussing food-borne diseases.

4.6.1 *Disease Is a War*

There are various reasons why a war metaphor is used in discussing food-borne diseases. One of them is the unpredicted and sudden appearance of an illness. The other function of war metaphors is to draw one's attention to the necessity of undertaking immediate and determined actions to overcome diseases.

In Francia viene segnalato un focolaio di diarrea emorragica che colpisce 16 persone

(In France the outbreak of the bloody diarrhea hit 16 people) *Il Fatto Alimentare*

Il motivo per cui solo nel maggio 2011 è scoppiata l'epidemia...

(The reason why the epidemics exploded in May 2011...) *Il Fatto Alimentare*

La salmonellosi colpisce in prevalenza i bambini

(Salmonella strikes mainly children) *Il Fatto Alimentare*

È è assai difficile che un'infezione sfugga e riesca a diffondersi

(It is very difficult since the infection escapes and succeeds in spreading) *Il Fatto Alimentare*

I polli e le uova alla diossina invadono l'Europa nel giugno del 1999

(The chickens and eggs with dioxin invaded Europe in June 1999) *GRECO*

Batterio killer, la Germania fa dietrofront

(Bacteria killer, Germany turns around) *Corriere della Sera*

Gli "agguati" dei microbi ai cibi

(The ambush of food microbes) *Corriere della Sera*

Quali sono i principali nemici da cui guardarsi?

(What are the main enemies that one should be beware of?) *Corriere della Sera*

Perché a due settimane dall'esplosione dell'epidemia di E.coli in mezza Europa, il panico ha ormai contagiato tutta l'economia

(Because 2 weeks after the explosion of *E. Coli* epidemics in half of Europe the panic has almost infected the whole economy) La Repubblica.

4.6.2 *Disease Is a Sport*

Since many prototypical sports, including soccer and rugby, have evolved from fighting [84], the domains of war and sport have many issues in common. They are both connected with gaining advantage, winning as well as being classified, etc. For example, the place in any classifications may be used to show the virulence of bacteria in food.

L'epidemia ha così guadagnato il secondo posto nella classifica delle intossicazioni alimentari europee dopo la Mucca pazza

(The epidemic has thus gained the second place after the mad cow disease in the classification of food poisonings) Il Fatto Alimentare.

4.6.3 *Disease Is a Physical Entity*

Food products often undergo personification in the discourse on food-borne disease. This perspective draws the attention of stakeholders to the source of infection. Their role in the infectious chain is strengthened by using trial metaphors to show their guilt or innocence in food poisoning.

In questi 36 giorni mentre cetrioli, pomodori e lattuga erano banditi dalle tavole, i cittadini hanno continuato a consumare germogli e ad ammalarsi

(During these 36 days when cucumbers, tomatoes and lettuce were banned from the tables people continued to eat sprouts and they became ill) Il Fatto Alimentare

I tedeschi “assolvono” i cetrioli spagnoli

(The Germans “discharge” the Spanish cucumbers) Corriere della Sera

I cetrioli importati dalla Spagna, inizialmente sospettati di aver provocato l'epidemia...

(The cucumbers imported from Spain, initially suspected of having caused the epidemics...) Corriere della Sera

Batterio killer, assolti i germogli di soia discharge

(Killer bacteria, the accused soy sprouts discharged) Il Messaggero.

Apart from food products themselves, viruses are also personalized. They are portrayed in an anthropomorphic way to stress the fact that they constitute a part of individuals' life:

Un carico medio di lavatrice contiene 100 milioni di *E. Coli* oltre a Norovirus, Salmonella o *Staphylococcus aureus*. Per eradicare questi sgraditi ospiti della nostra lavanderia occorrono temperature di almeno 40 gradi, spesso in combinazione con adatti detergenti

(An average load of laundry contains 100 million of *E. Coli*, Norovirus, Salmonella and *Staphylococcus aureus*. To eliminate these unwelcome guests in our laundry, one should wash at the temperature of at least 40°, often together with suitable detergents) *Corriere della Sera*.

4.6.4 Disease Is a Journey

A journey metaphor is also used to discuss the role of change agents, especially the role of alternation and learning. Moreover, this metaphor encourages participants to join the activity [85]. In the case of food-borne diseases, it may serve the following functions. First of all, as far as food products are concerned, they are treated as vehicles, responsible for “transporting” diseases:

Pesci e formaggi molli e semimolli i principali “veicoli” alimentari

(Fish as well as soft and semisoft cheese are the main food vehicles) *Il Fatto Alimentare*

Il veicolo dell'infezione non è ancora stato identificato

(The vehicle of the infection has not been identified yet) *Corriere della Sera*

Secondly, placing a disease itself under scrutiny, it is pictured as a dynamic entity, able to travel very quickly and potentially infecting many people located in various places.

La contaminazione parte dal Belgio

(The contamination starts from Belgium) *GRECO*

Contemporaneamente si sospetta che il batterio abbia varcato l'oceano arrivando negli Stati Uniti

(At the same time it is suspected that the bacteria has crossed the ocean and arrived in the USA) *TGCOM24*.

4.6.5 *Disease is a Natural Disaster*

Diseases may also be described by using the domain of natural disasters to show their power and vast consequences that are sometimes very difficult to estimate.

I “polli alla diossina”, scoperti in Belgio nello scorso fine settimana, stanno provocando un terremoto politico

(The chickens with dioxin discovered in Belgium during the last weekend are causing a political earthquake) La Repubblica.

4.7 Discussion

Taking into account the investigated metaphors, it can be stated that they differ in the way they shape risk cognition. As has been presented in the empirical part of this investigation, different metaphors have diversified potential of drawing one's attention to various aspects of food-borne diseases. Taking into account the virulence of food-borne diseases, the domain of war is very powerful. Verbs such as *invade* or *attack* are used to show the strength and unpredictability of diseases. At the same time, such nouns as *ambush* and *turnabout* may denote simultaneously the “tactics” of diseases and those infected. Thus, a metaphor of war can also be used to picture the power of food authorities, doctors and patients in overcoming food poisonings. Taking into account the above-mentioned features of a war metaphor, it can be compared to a double-edged sword that can serve two functions in food risk communication; it can show the malevolent side of food-borne disease as well as the potential of human beings and their knowledge in fighting with these illnesses. To sum up, it should also be underlined that the mentioned war metaphors can be used not only to denote the features of diseases but also the determined attitude of victims. Thus, a war metaphor, depending on its use, can picture food-borne diseases as very risky and difficult to overcome, and, at the same time, as the ones that can be fought and defeated by individual or group strategies, if only the latter are eager to combat the virulence of bacteria in food. The same applies to the metaphorical domain of natural disasters and sports that can portray both diseases and the infected ones as having potential and strength. An important approach is to depict food-borne diseases as physical entities. This perspective, stressing e.g. the role of vegetables or raw meat in the process of food poisoning, may draw one's attention to the proper selection of products and the right application of adequate hygienic procedures in food preparation. Moreover, the cognitive impact of metaphors can be shaped by other metaphors as well. For example, the speed of bacteria spread can be highlighted by the use of a travel metaphor. This approach stresses a vast area of potential strike as well as high speed of germ dispersion and highlights the awareness of food poisoning in various geographical locations.

In consequence, it should be underlined that metaphors should be selected with great care by information writers since they determine individuals' perception of diseases, raising or lowering the riskiness of food-borne diseases in the eyes of the general public. Thus, the selection of metaphors should mirror the intentions of information providers. If e.g. health authorities want the general public to fight with food-borne disease, war metaphors should be selected. When the tempo of disease spread is to be highlighted, a metaphor of journey may serve this purpose. It should also be added that the chosen metaphors should be in line with individuals' cognition. Consequently, the domains used in metaphors should be recognized by the general public. As has already been discussed in this contribution, well-known domains facilitate the understanding of such complicated and multi-layered issues as food-borne diseases.

4.8 Summary

The aim of this chapter was to discuss the metaphorical dimension of food-borne diseases. The author concentrated on the examples coming from the Italian press that show the metaphoricity of the discourse on food risks. Taking into account the plurality of domains used in the creation of metaphorical information on disease, it can be stated that metaphors are a powerful tool in the discussion on food-borne diseases since the selection of metaphors determines the cognition of risks related to food consumption. Moreover, relying on well-known metaphors may determine one's attitude to risky situations and the subsequent actions related to disease treatment.

Articles Quoted in Providing Examples

Il Fatto Alimentare

<http://www.ilfattoalimentare.it/storia-errori-epidemia-escherichia-coli-o104h4.html>.

<http://www.ilfattoalimentare.it/salmonella-infezioni-cibi-efsa-sicurezza-alimentare.html>.

<http://www.ilfattoalimentare.it/listeria-melone-vittime-usa-situazione-sotto-controllo.html>.

GRECO

<http://www.uniurb.it/giornalismo/lavori/greco/diossina.htm>.

La Repubblica

<http://www.repubblica.it/online/fatti/pollo/papitto/papitto.html>.

Corriere Della Sera

http://www.corriere.it/salute/nutrizione/11_maggio_31/batterio-killer-spagna_9c5eb4f2-8b6d-11e0-93d0-5db6d859c804.shtml.

http://www.corriere.it/esteri/10_giugno_26/farkas-salmone-ogm_744e9812-8149-11df-9a47-00144f02aabe.shtml.

http://www.corriere.it/salute/nutrizione/11_giugno_17/infezioni-alimentari-precauzioni-sparvoli_46878916-8dd7-11e0-b332-ace1587d6ad6.shtml.

http://www.corriere.it/salute/11_novembre_15/lavatrice-bassa-temperatura-peccarisi_8ce5c046-0ae4-11e1-8371-eb51678ca784.shtml.

http://finanza.repubblica.it/News_Dettaglio.aspx?code=645&dt=2011-06-09&src=TLB.

http://www.ilmessaggero.it/home_nelmondo/batterio_killer_assolti_i_germogli_di_soia_fazio_controlli_a_tappeto_no_blocco_import/notizie/151808.shtml.

Appendix

Confini della sicurezza: <http://www.uniurb.it/giornalismo/lavori/greco/titoli.htm>.

Corriere della Sera: <http://www.corriere.it/>.

Il Fatto Alimentare: <http://www.ilfattoalimentare.it/>.

Il Messaggero: <http://www.ilmessaggero.it/>.

Il Piccolo: <http://ilpiccolo.gelocal.it/>.

La Repubblica: <http://www.repubblica.it/>.

Panorama: <http://www.panorama.it/>.

TGCOM24: <http://www.tgcom24.mediaset.it/>.

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