

Leonor Pérez-Ruiz, Isabel Pizarro-Sánchez

# Online marketing of fresh fruit: A corpus based contrastive analysis (English & Spanish) of terminology related to texture

**Abstract:** We carry out a contrastive analysis (English-Spanish) of apple and pear descriptions. A comparable ad-hoc corpus for both fruits was compiled from websites of fruit retail businesses. We analyzed references to texture, i.e. the vocabulary used and the most frequent collocations in both languages. Explanations are characterized by a wide variety and density of terminology used quite straightforwardly to describe texture and mouthfeel sensations with great precision. Textural properties are presented mainly with descriptive adjectives and specific nouns, with a difference in usage depending on the language used and fruit variety being described.

**Keywords:** Apples, pears, textural characteristics, Spanish, English, corpus analysis

## 1 Introduction

We are currently witnessing a change of the traditional business paradigm. The widespread use of the Internet by companies to sell their products is a common practice worldwide. Online fresh fruit businesses are no strangers to this reality and most of them have a website through which they advertise the different varieties they produce and sell. In fact, these retailers are facing new challenges due to increasing digitalization and “have to manage their business in a context of competitive convergence, hybridization of store formats, and continuous expansion of online channels” (Bellini et al., 2021, p. 101).

These fruit retail businesses are characteristic in the sense that customers are not only interested in the price they have to pay, but also in the quality of the product they wish to buy. Behind each piece of fruit that these businesses offer, there are different procedures that contribute to making it more or less appetizing. The pleasure of eating it is the result of a combination of visual, tactile, olfactory and taste sensations. Therefore, in order to be able to judge whether a piece of fruit is of quality and to describe it with the intention of selling it, two basic

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**Leonor Pérez-Ruiz**, University of Valladolid, e-mail: leonor.perez@uva.es

**Isabel Pizarro-Sánchez**, University of Valladolid, e-mail: Isabel.pizarro@uva.es

aspects must be taken into account. First, the impressions that the piece of fruit evokes through the senses and also how to properly convey these impressions to the customers.

Detailed information on all these sensations can be found in the descriptive cards of apples and pears that appear on the websites of fruit businesses. In addition to their informative nature, these descriptions are also characterized by a distinctly persuasive tone, typical of commercial texts. The mastery of effective linguistic and rhetorical strategies for marketing these fruits is therefore a fundamental element for the success of these online sales platforms.

We are interested here in identifying and analyzing the terminology used in English and Spanish to refer to the sensory experience of texture in these descriptive cards of apples and pears. To this end, we have carried out a comparative analysis of the descriptions of these fruits, focusing on the way in which reference is made to their textural quality, the type and characteristics of the vocabulary used, and the most frequent collocations in both languages. For this purpose, we compiled a comparable ad-hoc corpus of fact sheets for both fruits from websites of fresh fruit businesses in both languages.

## 2 Sensory perceptions of fruit and their language

A potential buyer or consumer's first contact with a piece of fruit is through its smell, taste, texture, sound and visible shape and color. These make an impression in different sensorial ways and simultaneously. Subsequently, when the fruit is tasted and eaten, it is mainly the experience of texture and flavor that is involved. When biting into the fruit, hearing the crunch of the teeth through the skin or chewing its pulp, the first mouthfeel impressions are felt. Sensations such as its juiciness, sourness, crunchiness, hardness or sweetness are recognized.

While undergoing this sensory experience, it is common to react with spontaneous expressions of the perception it triggers in our system. The response can come in several ways, either non-verbally by stating one's appreciation with facial expressions or gestures, or we can demonstrate our preferences, likes or dislikes, with words, through assertions that may include objective statements and/or some type of evaluative or emotional analysis. These sensations provoked by an apple or a pear when eaten, and which are the product of all the senses of our organism, are clearly reflected in the way the language is used. The words used in that description create an image of that experience. The use of appropriate and adequate terms in these descriptions is vital to effectively define these sensory experiences.

As Dubois (2017) points out, it is interesting to observe how the expression of sensory experiences related to food shifts the focus of attention. In fact, it goes from the objective description of the food to the concrete action of its consumption, its evaluation and the expression that a consumer performs about the particular piece of fruit that has just been tasted.

To ensure effective marketing communication on fruit companies' websites, it is essential to use appropriate terminology that really engages consumers. A mix of informative and aesthetic terminology is undoubtedly of great benefit.

There are different approaches to the study of the language used to describe the main sensory attributes of fruit. Food and language have been studied in both anthropology and linguistics, with the purpose of analyzing the use of language as a medium to describe and communicate food experiences (Manning, 2012; Cavanaugh et al., 2014). The analysis of how different sensory experiences are encoded across lexical categories (Lievers & Winter, 2018) or the creation of a lexicon containing sensorial words (Tekiroğlu et al., 2014) are examples of other studies carried out from a linguistic perspective. In the field of advertising, and in order to promote the appropriate positioning of certain fruit varieties, research has been conducted on the emotions elicited by these foods (Romeo-Arroyo et al., 2021; Babicz-Zielińska et al., 2006). Other investigations have been carried out for product development purposes, commercialization, etc. (Suwonsichon, 2019). Furthermore, some research works have examined the translation problems of sensory attributes and texture terms, in various languages (Zannoni, 1997; Rohm et al., 1994; Lawless et al., 1997).

An important area that has been well analyzed has to do with meeting the needs of professional tasters and panelists. In fact, the reporting of all these sensations "is challenging for both trained panelists and consumers to describe due to the complexity of the multimodal stimulations that occur (...) during consumption that induce odor, taste, flavor and sound perception" (Ting et al., 2015: 195). To overcome this difficulty in verbalizing sensory perceptions, panelists are trained in describing food characteristics and provided with insights into vocabulary. Chauvin et al. (2010) have identified different apple and pear texture attributes while Duicer (2001) studied auditory sensations that are key to texture perception. Swahn et al. (2010) carried out a study to identify the terminology used by professional tasters and consumers to describe apples. They developed a semantic framework referred to this fruit and its sensory attributes. These authors proposed this frame as a basis for a broader sensory semantic framework.

Despite the wide range of perspectives and aspects that have been considered, describing the taste, aroma or texture of food can often be difficult. This is because these sensory attributes result from the interaction between the consumer and the piece of fruit, so they are not intrinsic characteristics of the food.

Thus, the vocabulary used to describe these multisensory phenomena is largely subjective.

### 3 Methodology

As we have pointed out, the analysis of this work has focused on how sensory language related to touch is used to describe pears and apples. To this end, we have carried out a quantitative and qualitative analysis of a comparable bilingual study corpus, compiled ad hoc from apple and pear description fact sheets in English and Spanish.

Following Corpas Pastor (2001), Seghiri (2017), Ortego-Antón (2019) and Pérez-Ruiz & Ortego-Antón (2020), our corpus has the following characteristics. It is a comparable corpus of texts collected and downloaded from websites of Spanish and English-speaking food companies, based on their availability, user profile, representativeness, size and balance. As for availability, the selected texts were downloaded from fresh produce companies of different sizes, from large companies to fruit retailers. These texts correspond to an expert communication (using specialized language) and non-expert or consumer communication (using more general and vague language). The corpus is representative, both quantitatively and qualitatively. On the one hand, quantitiveness has been achieved with the inclusion of texts belonging to the same textual genre, in English and Spanish. As for qualitiveness, we have verified representativeness through the program ReCor (Seghiri, 2006, 2015; Corpas Pastor & Seghiri, 2009, 2010), which indicates that the corpus is representative with a minimum of 200 texts and 30 000 tokens. In terms of size (see Table 1), this corpus consists of approximately 120 000 words, 60 000 in each language and 30 000 for each fruit and language.

**Table 1:** Size of CoFr corpus.

	<b>Name of corpus</b>	<b>Number of tokens</b>	
Apples	CoFrAp_ES	31883	58501
	CoFrAp_EN	26618	
Pears	CoFrPe_ES	37585	60674
	CoFrPe_EN	23089	
	Total	119175	

The English texts come from North American and British companies, while the Spanish texts are mainly from Spanish companies, but also from Spanish-American ones. Finally, balance is achieved through two factors. The first is the number of different businesses from which the texts were taken, in our case over 100. The second factor, which also defines balance, has to do with the date when the texts were downloaded, in our case between 2019 and 2021.

Once the texts had been selected and downloaded, any sections that might introduce noise were removed. The cleaned texts were then converted to txt format to make them usable for our linguistic analysis. The first step in analyzing our corpus was done with AntConc 3.5.7, a corpus analysis software (Anthony, 2018). We ran AntConc to obtain lists of words with the help of the Word List tool. Then, to filter the results, we used a previously created and loaded stop word list that included common function words, proper names and abbreviations. Finally, the results were narrowed down so that only terms with a frequency of four or more were examined in this research. The final word list was manually reviewed to identify the relevant terminology and frequent phraseology in both languages. We used the AntConc Cluster tool to generate lists of 3-gram clusters to the left and right of key terms such as *firm* or *crujir* (crunch). This allowed us to identify the most common expressions used to describe apples and pears, for example *firm but tender* or *cruje al mascarla* (crunches when chewed).

## 4 The description of texture in CoFr corpus

Texture discrimination, in relation to food, has been described by Szczesniak (2002, p. 215) as “the sensory and functional manifestation of the structural, mechanical and surface properties of food detected through the senses of vision, hearing, touch, and kinesthetics”. This implies that, since texture is a sensory property, only humans can perceive and describe it. Also, because texture is a multi-parameter attribute, a range of characteristics need to be considered. Furthermore, texture is perceived in different ways, with touch and pressure being the most significant (Szczesniak, 2002: 216).

Both texture and mouthfeel are main determinants of consumer acceptability for foods, as they play a substantial role in the evaluation of a piece of fruit. Both are unique and complex attributes perceived as sensations by the lips, tongue, teeth or palate. While texture is mainly used “in reference to solid and semi-solid foods”, mouthfeel has to do with the tactile properties perceived when foods or drinks “are placed in the mouth until they are swallowed” (Guinard & Mazzuchelli, 1996, p. 213).

As stated, there are various common characteristics that are considered to be primary indicators of apples and pears texture and mouthfeel fresh quality. These are of great significance when it comes to appreciating these fruits, which is why adjectives related to texture are very common in the description of apples and pears. In this study of texture, we analyzed the language used to describe these attributes. In order to do this, we focused our textual analysis on the terms that describe these sensations that are associated with the *flesh* of the fruit.

In the fact sheets studied, the textural quality of the flesh of apples and pears is described using many overlapping terms (*firm, tender, juicy, dense, fine; consistente, compacta, tersa...*). But, of course, both fruits have specific and differentiating characteristics. Also, depending on the different varieties available on the market, and because fruits undergo diverse textural changes during ripening and post-harvest, these texture and mouthfeel sensations are defined in various ways. In fact, we find that descriptive adjectives are used differently in the texts analyzed.

In order to trace the terms used to evaluate flesh texture, we have followed Costa et al. (2011), who identified the following parameters to express optimal quality: crispiness, firmness and juiciness. In what follows, we present the results of the analysis of these textural expressions in what we believe to be logical and useful groupings of related properties.

## 4.1 Crispiness

Crispiness has been commonly acknowledged as the essential attribute affecting consumer preferences (Costa et al., 2011). The term *crisp* describes an acoustical perception, i.e. the tendency of certain fruits, e.g. apples, to yield suddenly with a characteristic sound when subjected to an applied force (Jowitt, 1974; Chauvin et al., 2010). Apples are crisp because both the resistance in the mouth to its breaking apart and the release of juices make us to experience this sensation when we bite them (Mouritsen & Styrbæk, 2017: 103).

In our analysis, we note a clear prevalence of adjectives relative to crispiness (*crisp, crispy*) in the apple subcorpus compared to the pear one (see Tables 2). According to a search with Google's Ngram Viewer, which tracks digitized books, *crisp* (0.0005296%) is a much more popular term than *crispy* (0.0001054%). This is also the case in our study, where the term *crisp* is much more preferred than the term *crispy*. *Crisp* directly refers to the flesh of the fruit in almost half of the occurrences in both subcorpora, CoFrAp\_EN and CoFrPe\_EN. It also often applies to *texture, apple* and *skin*.

**Table 2:** The adjectives *crisp/y* in English corpora.

		Crisp	Crisp/Flesh	Crispy	Crispy/Flesh
Apples English	CoFrAp_EN	0.40%	0.17%	0.02%	0.004%
Pears English	CoFrPe_EN	0.27%	0.15%	0.05%	0.013%

Contrary to what was observed in the English subcorpus, there are not as many occurrences of terms referring to crispiness in the Spanish texts (see Table 3), and the vast majority (93%) refer to apples. Of the two possible uses *-crocante* and *-crujiente-*, the latter is the most common, and is almost always associated with the noun *flesh* (*carne, pulpa*).

**Table 3:** The adjectives *crocante/crujiente* in Spanish corpora.

		Crocante	Crocante/ carne	Crocante/ pulpa	Crujiente	Crujiente/ carne	Crujiente/ pulpa
Apples Spanish	CoFrAp_ES	0.02%	0	0	0.16%	0.13%	0.03%
Pears Spanish	CoFrPe_ES	0.01%	0	0.003%	0	0	0

References to the crispiness of apples in the English subcorpus are usually accompanied by strong intensifiers (e.g. *remarkably crisp; extremely crisp; wonderfully crisp; a terrific apple crisp*) or, with a similar sense, collocate with *bite* (*crisp bite, fine-flesh crisp bite*). But we have also found instances of attenuating hedges (*less crisp; a little tender but still crisp*). In the Spanish subcorpus, the identified intensifiers are less emphatic (*muy crocante, muy crujiente, más crujiente*). In the pear subcorpus, no examples of intensifiers collocating with references to crispiness were identified, with the sole exception of *no tan crujiente* (not so crisp) which rather marks attenuation.

## 4.2 Crunchiness

Authors do not seem to come up with a clear and precise differentiation between the crisp and crunchy sensation (Fillon & Kilcast, 2002). The distinction between these two terms may lie in the pitch of the sound (Vickers, 1984), with the term *crunchy* being applied to a type of texture that is hard and dense and “fractures without prior deformation producing a loud, low-pitch sound that is repeated

over several chews” (Fillion and Kilcast, 2002: 28–29). In languages such as Japanese or Chinese, there is a more subtle differentiation of these sensations, which implies the existence of a variety of terms to describe them (Szczesniak, 1988; Yoshikawa, Nishimura, Tashiro, & Yoshida, 1970). In French, the translation of *crispy* “is not used to describe the same products as in English” (Varela et al., 2008). And in both Italian and Spanish, no discrimination is made between crispiness and crunchiness.

In Spanish, therefore, the translation of both terms *-crisp/y*, *crunch/y*- is *crocante* or *crujiente*. The Spanish Royal Dictionary (DRAE) makes no distinction in the definition of these terms. The verb *crujir*, from which *crujiente* derives, is defined as *hacer cierto ruido [con los dientes] cuando rozan unos con otros* (to make a certain noise with the teeth when they rub together). *Crocante*, in turn, is defined as *cruje al mascarla* (crunches when chewed) (DRAE, 2014). As we see, *cruje*-the third person of the present simple *crujir*- is used in this second definition, clearly reflecting this lack of discrimination.

In the apple subcorpus, both *crunch* and *crunchy* are used in a similar way. The difference lies in that *crunchy* collocates with *flesh* 50% of the occurrences, whereas *crunch* never does. In the case of pears, *crunchy* is much preferred but never collocates with *flesh*, it does with *texture* or *pear*.

**Table 4:** The adjectives *crunch/y* in English corpora.

		Crunchy	Crunchy/Flesh	Crunch	Crunch/Flesh
Apples English	CoFrAp_EN	0.04%	0.02%	0.04%	0
Pears English	CoFrPe_EN	0.10%	0	0.03%	0

Fillion & Kilcast (2002, p. 28) point out, regarding fruit, that “*crunchy* seems to be more universally used than *crispy*”. But this is not what we have observed in our corpora (see Table 5). It is striking that the use of the terms *crunch/y* is much lower than the use of *crisp/y*. This is specially so in the apple subcorpus, where the frequency is even lower than in the pear one.

**Table 5:** Comparison of occurrence of the adjectives *crisp/y* and *crunch/y* in English corpora.

		Crisp/y	Crunch/y
Apples English	CoFrAp_EN	0.41%	0.08%
Pears English	CoFrPe_EN	0.32%	0.13%



According to our search with Google's Ngram Viewer, *crunch* (0.0001836%) is more widely used than *crunchy* (0.0000724%), but our results show otherwise, as can be seen in Table 4. While *crunchy* triples the occurrences of *crunch* in our pear subcorpus, both terms are equally used in our apple subcorpus.

References to the crunchiness in apples also often collocate with intensifiers (*perfect crunch*, *pleasant crunch*, *great crunch*). In the case of pears, it is interesting to note that when the term *crunch* is used with a specification, it often reflects either a similarity to apples -*firm crunch* (*like an apple*); *with the crunch of an apple*; *sweet and juicy like a pear*; *crunchy like an apple*- or an attenuation -*has a bit of crunch*; *with a nice crunch*.

### 4.3 Firmness

The attribute of firmness is another parameter widely considered in the definition of the quality standards for some fruit varieties and one of the major features estimating consumer preferences (Bonany et al., 2013). Firmness is defined as a high resistance to deformation by an applied force (Jowitt, 1974), which in the case of food is exerted while chewing. The parameters used to express firmness are *hard* and *firm* (Szczesniak, 2002). These attributes, to a certain extent, include tactile, visual and auditive sensory perceptions.

Bonany (2013) observes that firmness is a typical parameter for apples. But our results show that *firm* is used with a similar frequency in the apple subcorpus as in the pear one (see Table 6). Whereas in the apple subcorpus the term *firm* always collocates with *flesh*, in the pear one only 62.5% of the occurrences do so. Other occurrences of *firm* apply mainly to *pear* and *texture*.

Jowitt (1974) indicates that *firm* is a preferred term to *hard*. In fact, in fruit discourse we find expressions such as *firm-to-hard*, *stone hard* or *dangerously hard*, which show how this characteristic is not always used to describe a desirable quality of fruit. On the contrary, *firm* reflects the optimal state.

In line with this, we see that *hard* is used less in the apple subcorpus (0.12%) and even less in the pear one (0.02%). Besides, when it is used in the pear subcor-

**Table 6:** The adjectives *firm/hard* in English corpora.

		Firm	Firm/ Flesh	Hard	Hard/ Flesh
Apples English	CoFrAp_EN	0.20%	0.20%	0.12%	0.02%
Pears English	CoFrPe_EN	0.24%	0.15%	0.02%	0.01%

pus, *hard* is not always considered a positive attribute of that variety (*A ripe pear is firm but not rock hard*). Thus, these results support the idea that *firm* is widely considered a more positive feature than *hard*.

The adjectives used to define firmness in our Spanish subcorpora are *firme* and *dura* (see Table 7). In the apple subcorpus *firme* is the most preferred term, being associated almost equally with *carne* and *pulpa*. On the contrary, the occurrence of *dura* is only 0.02% and none of them is associated with *carne* or *pulpa*. As for the pear subcorpus, interestingly, *dura* has as many appearances as *firme*, and they are all associated with *carne*. *Firme*, on the other hand, is mostly associated with *pulpa*.

**Table 7:** The adjectives *firme/dura* in Spanish corpora.

		Firme	Firme/ carne	Firme/ pulpa	Dura	Dura/ carne	Dura/ pulpa
Apples Spanish	CoFrAp_ES	0.06%	0.03%	0.03%	0.02%	0	0
Pears Spanish	CoFrPe_ES	0.04%	0.003%	0.03%	0.04%	0.04%	0

In the apple subcorpus, phraseology referring to firmness are of various types. On the one hand, intensifiers related to *firm* are not very emphatic (*more firm*, *very firm*), yet in the case of *hard* they tend to be (*rather hard*, *truly hard*, *specially hard*, *very hard*, *rock-hard*). And there is also a tendency to elaborate more complex phraseology, since one single adjective with a hedge does not seem enough to describe this textural sensation (*firm but tender*, *firm though yielding*, *firm yet tender*). In the pear subcorpus there are not many instances where hedges are used in any way, but, as in the case of crunchiness, they resort to similes with apples in order to describe this characteristic (*the taste of a pear with a firm apple texture*). In the Spanish subcorpus, there are not expressions referring to firmness.

#### 4.4 Juiciness

In a clear segmentation, consumers group their predilections for fruit into either *sweet/crisp* or *acid/juicy* (Daillant-Spinnler et al., 1996). But, whatever their preferences, they always expect that the fruit they eat provides a sensation of juiciness. In fact, a reduction in this attribute tends to be associated with a texture dysfunction.

Juiciness is an intense and substantial texture attribute of pears and apples (Harker et al., 2003), and, as stated, is associated with fruit no matter which its characteristics are, *crisp*, *soft* or *melting*. The adjectives used to express *juiciness* are *juicy* and *jugoso/a*. We found a higher index of *juicy* use in the pear subcorpus than

in the apple one. In our apple subcorpus most of the occurrences of *juicy* collocate with *flesh*, whereas in the pear subcorpus only 42.2% of them do so (see Table 8), and the rest of them collocate with *fruit*.

**Table 8:** The adjective *juicy* in English corpora.

		Juicy	Juicy / Flesh
Apples English	CoFrAp_EN	0.18%	0.15%
Pears English	CoFrPe_EN	0.34%	0.15%

In the apple subcorpus, the term *jugosa* is associated with *carne* in 52.2% of the occurrences and only 17.4% of them with *pulpa* (see Table 9). Only 69.6% of the occurrences of *jugosa* are collocated with one of the flesh-related terms (*carne*, *pulpa*). In the pear subcorpus, 16.9% of the occurrences of *jugosa* collocate with *carne* and 62.7% with *pulpa*.

**Table 9:** The adjective *jugosa* in Spanish corpora.

		Jugosa	Jugosa/ carne	Jugosa/ pulpa
Apples Spanish	CoFrAp_ES	0.07%	0.04%	0.01%
Pears Spanish	CoFrPe_ES	0.16%	0.03%	0.10%

It is interesting to note that, in both subcorpora the texts referring to pears tend to use the term *jugosa* more often than in the apple subcorpus (see Table 10).

**Table 10:** Comparison of occurrence of the adjectives *juicy* and *jugosa* in English & Spanish corpora.

		Juicy	Jugosa
Apples English	CoFrAp_EN	0.18%	
Pears English	CoFrPe_EN	0.36%	
Apples Spanish	CoFrAp_ES		0.07%
Pears Spanish	CoFrPe_ES		0.16%

As far as phraseology is concerned, pears tend to be described with more emphatic terminology than apples. We have identified expressions such as *exceptionally juicy*, *extremely juicy*, *very juicy* and *very juicy-like*, in the pear subcorpus, whereas in the apple subcorpus, as already mentioned, the references are softer

(*very juicy, moderately juicy*). In the Spanish subcorpus, these references are practically nonexistent.

Also, in the pear subcorpus, we find other references to this attribute which are more elaborated and persuasive, and which are not present in the apple subcorpus:

Are as *juicy* and delicious as they are gorgeous  
 Eat these pears out of hand to best enjoy their *juicy* and delicious flavor  
*Juicy* eating experience  
 The tender bite comes with a flood of sweet and *juicy* goodness

## 4.5 Other differentiating factors between apples and pears

There are other textural characteristics described in our corpus that tend to be specific to either apples or pears, marking a difference between both fruits. These are mostly present in the English subcorpus.

Descriptions of apples often refer to their characteristic snap when breaking. This characteristic bite is emphasized in these descriptions. So, expressions like *snappy bite, snaps clearly, breaking off in chunks when eaten, bite into a Crispin for a great crunch* are typical in the descriptions analyzed.

Pears, on the contrary, are appreciated for other characteristics. There are multiple references to the dense texture of this fruit (*denser than the flesh of a water melon; greater flesh density*). The texture is also described as buttery (*buttery-textured*), smooth (*smooth flesh*) or creamy (*creamy texture*). This distinctive texture produces a feeling of *melting into your mouth*.

## 5 Conclusion

References to texture were analyzed using a corpus of apple and pear descriptive cards in English and Spanish. In order to determine the terminology used to describe texture and mouthfeel sensations, we have identified the main parameters used to express optimal textural quality, namely crispiness, firmness and juiciness as related to flesh (*carne* and *pulpa*, in the case of the Spanish subcorpus).

In general terms, an apple that meets market quality standards would be described as *firm, crisp* and *juicy*. For pears, texture attributes differ among varieties, but a *firm but buttery, smooth* and *juicy* texture would be considered as an indication of a good quality pear.

Regarding crispiness, the main terms used to describe this characteristic are *crisp* and *crujiente*. Only half of the occurrences of *crisp* collocate with flesh,

whereas *crujiente* mainly does so with *carne*. The terms *crunch* and *crunchy* also correspond to *crujiente* and *crocante* in Spanish, although in English there seems to be a difference in meaning based on the pitch of the sound produced when chewed. Still, the use of *crunch* and *crunchy* as compared to *crisp* is much lower (16,3%). As for the intensifiers associated with these terms, strong hedges are used with apples in the English subcorpus, but not with pears or in the Spanish one.

With respect to firmness, *firm* and *firme* are the preferred terms for both apples and pears, although *dura* is used as much as *firme* in the Spanish subcorpus. In the case of apples, these terms are always associated with *flesh* or *carne* and *pulpa* in similar numbers. Phraseology related to firmness, mainly in the apple subcorpus, tend to be more elaborate than with other attributes in order to be more precise in describing firmness.

Juiciness is a common attribute of pears and apples and its absence would imply a lack of quality. The most common adjectives used to describe juiciness are *juicy* and *jugoso*. These terms are more frequent in the pear subcorpus than in the apple ones. Also, in the English subcorpus, pears are described more thoroughly and emphatically than apples, whereas in the Spanish subcorpus these descriptions are completely absent.

In general, we find that the terminology used to describe mouthfeel and texture sensations is relatively straightforward. In addition, these texts use precise and specific terminology to reflect concrete and objective sensations. Many of these descriptions are also often accompanied by hedging devices that help to quantify their intensity.

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