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A study on the consumption of coriander (*Coriandrum sativum* L.) and consumers' perception of its functional properties

Um estudo sobre o consumo do coentro (*Coriandrum sativum* L.) e percepção de suas propriedades funcionais

Un estudio del consumo de cilantro (*Coriandrum sativum* L.) y percepción de sus propiedades funcionales

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Abstract
Coriander (*Coriandrum sativun L.*) is a vegetable widely produced and consumed in Brazil being widely used as a condiment in many dishes. It has an excellent nutritional value as a source of calcium, iron, vitamin C. Furthermore it has functional properties such as anti-inflammatory, antioxidant and antimicrobial. Although it has so many benefits, there are few studies in this field that specifically analyze the use of that vegetable as condiment in food exploring its potential to add flavor. This way, this research carried out a survey on the consumption of coriander as condiment and evaluated the profile of consumers and their knowledge about that vegetable. It was found that coriander is consumed by 67.7% of interviewees mainly those who live in the Northeast and North regions where coriander is traditionally used in cooking. However, there is still a portion (32.3%) of consumers who still reject it. As a substitute for other condiments, coriander is more often used instead of parsley and the main food to which it is added is fish. When one takes into account the purchase intention of industrialized products with the addition of coriander, it is observed that seasoned cheese and snacks are the most cited. In addition, it was possible to observe that flavor is the main motivator for consumption ahead of health-related attributes. Thus, it was possible to observe that consumers are still unaware of the main beneficial characteristics of coriander. In this way, there is the possibility of developing new products using coriander as well as the relevance of carrying out studies with an emphasis on this flavouring.
Keywords: Vegetable; Condiment; Flavor; Consumers.

Resumo
O coentro (*Coriandrum sativun* L.) é uma hortaliça amplamente produzida e consumida no Brasil, sendo muito utilizada como condimento em vários pratos. Apresenta excelente valor nutricional, como fonte de cálcio, ferro, vitamina C. Além disso, possui propriedades funcionais, como capacidade anti-inflamatória, antioxidante e antimicrobiana. Contudo, mesmo diante de tantos benefícios, existem poucos estudos na literatura que analisam especificamente o uso dessa hortaliça como especiaria em alimentos. Diante disso, a presente pesquisa realizou um levantamento sobre o consumo do coentro como especiaria e avaliou o perfil dos consumidores e seu conhecimento sobre essa hortaliça, -. Verificou-se que o coentro é consumido por 67,7% dos entrevistados, principalmente os que residem nas regiões Nordeste e Norte, onde o coentro é tradicionalmente usado na culinária. Porém, ainda há uma parcela (32,3%) de consumidores que ainda o rejeita. Como substituto a outros condimentos, a hortaliça é mais utilizada no lugar da salsa, e o principal alimento onde a hortaliça é adicionada é o peixe. Quando se avalia a intenção de compra de produtos industrializados com adição de coentro, observa-se que os queijos temperados e lanches são os mais citados. Além disso, foi possível observar que o sabor é o principal motivador para o consumo, ficando à frente

dos atributos relacionados à saúde. Associado a isso, foi possível observar que os consumidores ainda desconhecem as principais características benéficas do coentro. Dessa forma, verifica-se a possibilidade de desenvolver novos produtos utilizando o coentro, bem como a relevância da realização de estudos com ênfase nessa especiaria.
Palavras-chave: Hortaliça; Condimento; Sabor; Consumidor.

Resumen
El cilantro (*Coriandrum sativun* L.) es una hortaliza ampliamente producida y consumida en Brasil, siendo muy utilizada como condimento en muchos platos. Tiene un excelente valor nutricional, como fuente de calcio, hierro, vitamina C. Además tiene propiedades funcionales, como antiinflamatorio, antioxidante y antimicrobiano. Sin embargo, aún frente a tantos beneficios, existen pocos estudios en la literatura que analicen específicamente el uso de vegetales como condimento en los alimentos. Por ello, esta investigación realizó una encuesta sobre el consumo del centro como especia y evaluación o perfil de dos consumidores y su conocimiento sobre esta hortaliza. Se constató que el cilantro es consumido por el 67,7% de los dos entrevistados, principalmente los que viven en las regiones Nordeste y Norte, donde el cilantro es tradicionalmente utilizado en la cocina. Sin embargo, todavía hay una parte (32,3%) de los consumidores que todavía la rechazan. Como sustituto de otros condimentos, la hortaliza se usa más en lugar la salsa, siendo el alimento principal donde se le agrega la verdura es el pescado. Cuando se valida la intención de compra de productos industrializados con la adición de un cilantro, se observa que los quesos sazonados y los snacks son los más citados. Además, se pudo observar que el sabor es el principal motivador de consumo, frente a dos atributos relacionados con la salud. Asociado a esto, fue posible observar que los consumidores aún desconocen las principales características beneficiosas del cilantro. De esta forma, se verifica la posibilidad de desarrollar nuevos productos utilizando el cilantro, así como la pertinencia de realizar estudios con énfasis en esa especia.
Palavras clave: Hortalizas; Condimento; Gusto; Consumidor.

1. Introduction

Coriander (*Coriandrum sativun L.*) is a widely produced vegetable used as condiment belonging to the Apiaceae family and being originated in the eastern Mediterranean. It has an annual cycle of 45 to 55 days and its cultivation is usually carried out in a traditional way under hot weather as it does not tolerate low temperatures (Prachayasittikul et al., 2018; Sousa et al., 2011; Reis & Lopes, 2016).

In Brazil, coriander was introduced by Portuguese and since then it has shown great value and socioeconomic importance especially in the North and Northeast regions. The state of Amazonas stands out, which has great demand and excellent market value, with the main focus being the metropolitan region of Manaus, both for its high cultivation and for the urban agglomeration which has a high consumption of that vegetable (Cardoso et al., 2019).

Coriander is the second largest leafy vegetable in Brazil, behind lettuce, with 11% growth in the total cultivated area between 2012 and 2015 (Udsen, 2016). However, there is a great lack of updated statistical data on Brazilian production of coriander. According to Reis and Lopes (2016), that is a fact that can be explained because most of the cultivation is carried out on small properties.

Before its fruits ripen, coriander has a strong aroma getting sweet after ripening. It is precisely this attribute that is used in cooking as well as its flavor gives food its own sensory characteristics. As the leaves are susceptible to rapid loss of water after harvest, it is common to sell them powdered, dehydrated and minced. The diachene seed fruit composed of two achenes is usually sold as a whole (Figueiredo, 2016; Porto & Rosa, 2018; Santos, 2020).

The consumption of coriander is fundamentally based upon its aroma and flavor which give food peculiar sensory characteristics and all parts of the plant are edible. According to Figueiredo (2016), the dried seeds are used as flavoring agents; the stems in stews; the roots, leaves, stem and nuts can also be used as condiment. The fruits are more relevant for medicinal use. In Brazilian cuisine, the most common is to use its leaves *in natura* as condiment.

In addition to the characteristics of coriander as a condiment, its nutritional and pharmaceutical properties stand out such as digestive, antioxidant, antimicrobial, hypoglycemic, anti-hyperlipidemic, analgesic, anti-inflammatory, anticonvulsant activities, etc. Its antibacterial activity is due to the presence of phenolic compounds, carotenoids, tannins, flavonoids,

coumarins and terpenes. It is important to say that the main one is linalool ($C_{10}H_{18}O$). The antioxidant activity comes from phenolic constituents and carotenoids. The anti-inflammatory activity is due to tannins, flavonoids, coumarins, saponins and terpenes (Porto & Rosa, 2018; Zanusso-Junior, 2011).

Coriander has high nutritional value being an excellent source of calcium, iron, vitamin C and provitamin A. Due to its nutritional composition, coriander has a wide range of uses. It can be added to food as a substitute for sodium chloride reducing salt consumption as well as it can help health (Araújo et al., 2020).

Thus, the objective of this research was to evaluate the consumption of coriander as condiment in order to identify the profile of consumers in Brazil and their perception of that vegetable in terms of functional properties.

2. Methodology

A descriptive and exploratory research was carried out, with data collection through the application of on line survey (Minin, 2006). The questionnaire was developed that sought to evaluate the coriander consumer identifying their profile and knowledge about the properties of it. For that, 16 questions were constructed. Five of them to know the sociodemographic profile of the interviewees and eleven directed to the research objectives. All questions were multiple choice. Among them, one can mention: “What benefit(s) do you expect from consuming coriander?”, “What type of food do you add coriander to?”, “What reason(s) would make you consume food containing coriander?”. The questionnaire was answered by consumers who were 18 and by people of all regions of Brazil based upon wide dissemination on social networks. Participants were asked to answer an online survey that was available on Google Docs. The average time for each answer was approximately 5 minutes. It is important to say that all participants accepted to participate in that research by voluntarily answering the online survey. Participants were also informed that they were free to leave the research at any time.

The methodology described by Barbetta (2002) was used in order to determine the sample size. The following formula stands for:

$n^o = 1 / E^2$

n^o = first approximation of the sample; E = tolerable sampling error.

A confidence level of 95% and a tolerable sampling error of 5% was considered. After the calculations, a minimum sample of 400 participants was obtained. After that, the questionnaire was opened on the platform and one could see that 415 responses were obtained.

According to Resolution nº 510/2016 - Clause 1 - Sole paragraph, item I and Clause 2 - item XIV, the survey did not require approval by CEP/CONEP system because it was a public opinion survey, therefore, the signature of the Informed Consent (TCLE - initials in Portuguese that stands for Termo de Consentimento Livre Esclarecido) was waived.

2.1 Data analysis

Initially, a descriptive and exploratory analysis of the data was carried out to extract information about the socioeconomic data of the participants and consumption habits with the help of Microsoft Excel® software.

Then, a Correspondence Analysis (CA) was performed to verify the association between food that coriander is used in different regions of Brazil. The result of this correspondence analysis is demonstrated through a biplot. Data analysis was performed using the R programming language version 3.5.2.

In order to understand the variables that affect coriander consumer behavior, Friedman's non-parametric statistical test was performed through the sum of the scores given by consumers for each question and the result of the sum was compared by

the post-hoc Nemenyi's test. Nemenyi's test makes comparisons with 5% of significance between pairs to verify if there is a significant difference between the samples. Data analysis was performed using the R programming language version 3.5.2.

Based upon Friedman's method combined with the post-hoc Nemenyi's test, the questions addressed in the questionnaire were analyzed: In what type of food do you add coriander? And what reason(s) would make you consume food containing coriander?

3. Results and Discussion

By 415 responses obtained, 66.3% of interviewees were female and 33.7% male. Most of them live in Brazil's Southeast (58.8%) and Northeast (25.8%). Regarding the age, most were between 36 and 50 years old (36.6%).

In order to know the sociodemographic profile of coriander consumers, the characteristics of the participants were separated into 'Consume' and 'Does not consume'. Table 1 shows the distribution of coriander consumers according to their socio-demographic profile.

Table 1: Participants sociodemographic data according to coriander consumption.

CHARACTERISTICS	CONSUME		DOES NOT CONSUME	
GENDER				
Female	191	69,5%	84	30,5%
Male	90	64,3%	50	35,7%
EDUCATION				
Elementary School	5	100,0%	0	0,0%
High School	36	65,5%	19	34,5%
Technical Education	19	61,3%	12	38,7%
Undergraduation	100	70,4%	42	29,6%
Graduation	121	66,5%	61	33,5%
MONTHLY INCOME				
From 1 to 2 minimum wages	91	66,9%	45	33,1%
From 3 to 5 minimum wages	79	69,9%	34	30,1%
From 6 to 10 minimum wages	52	57,8%	38	42,2%
More than 10 minimum wages	59	77,6%	17	22,4%

Source: Authors.

A similar percentage of coriander consumers is observed in research participants regardless of being men or women, having completed high school, technical education, undergraduation or/and graduation and having a monthly income of up to 5 minimum wages in agreement with the profile of the research participants. Income is not a factor that influences the consumption of coriander as it is an affordable vegetable and it can also be grown at home.

Relating the education of consumers with knowledge of the nutritional and functional quality of coriander (Table 2), it is possible to observe that the highest percentages of knowledge are among those who have already completed undergraduation or graduation although it is a low percentage. That demonstrates that the level of education is related to a greater knowledge about coriander. However, it appears that in percentage terms the division is very close demonstrating that the consumption of coriander is distributed in a similar way among the interviewees when it comes to sociodemographic data.

Table 2: Schooling of coriander consumers and their knowledge of nutritional and functional quality.

Education	Consumers	KNOW		DO NOT KNOW	
Elementary School	5	0	0,0%	5	100,0%
High School	36	2	5,6%	34	94,4%
Technical Education	19	0	0,0%	19	100,0%
Undergraduation	100	18	18,0%	82	82,0%
Graduation	121	22	18,2%	99	81,8%

Source: Authors.

It is observed in Table 2 that even participants with a higher level of education do not know the nutritional and functional qualities of corinder.

Considering the number of answers by region, it was possible to provide an overview of the percentage of coriander consumers in each of them (Table 3). It was found that the Northeast region had the highest percentage of positive responses regarding the consumption of coriander followed by the North and by the Midwest regions. The South and Southeast presented similar percentages where just over half consume the vegetable. Such data corroborate the findings in the literature which present the Northeast and North Brazilian regions as the largest consumers of that vegetable (Pedrosa et al., 1984 apud Alves et al., 2005). This may be related to the fact that coriander was introduced in Brazil by Portuguese and it received prominence in the North and Northeast due to the hot climate (Kaneko, 2006; Cardoso et al., 2016; Pinto et al., 2018).

Table 3: Distribution of coriander consumers by region.

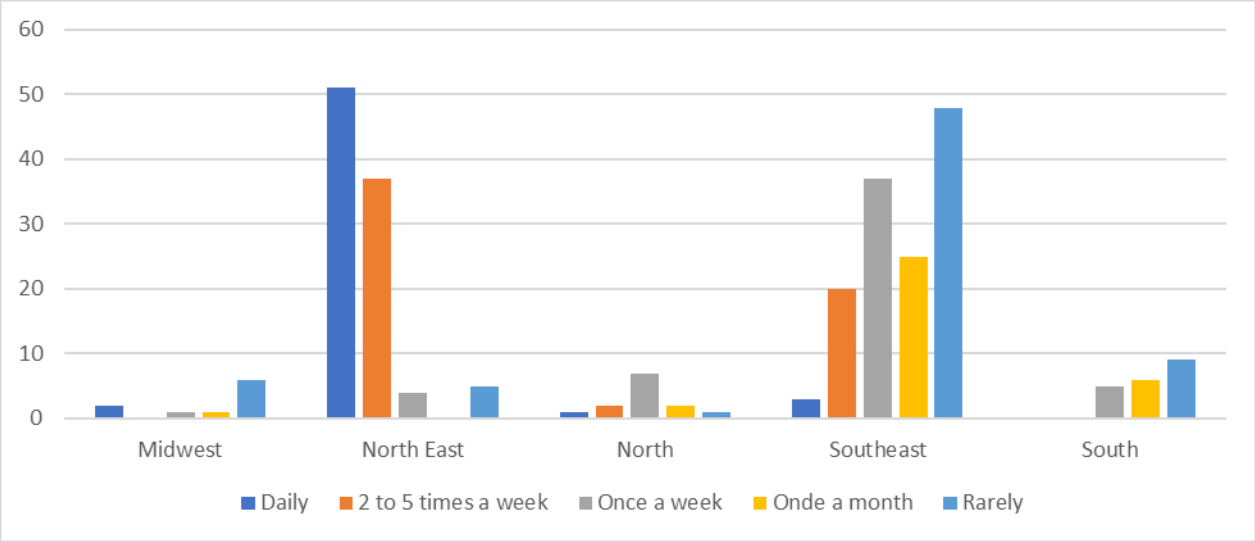
Region	Interviewees total	Number of consumers	% of region consumers
Midwest	14	10	71,43
North East	107	100	93,46
North	15	13	86,66
Southeast	244	138	56,55
South	35	20	57,14

Source: Authors.

The data in Tabel 3 reinforce the higher consumption of coriander in the northeast and north, wich is confirmed by the higher frequency of consumption in the northeast (Figure 1).

The frequency of consumption showed a homogeneous distribution among interviewees. 40.5% consume it daily or up to 5 times a week, 20.2% once a week, 12.9 once a month and 26.5% rarely consume it. There was a higher frequency of consumption among interviewees in the Northeast region who consume it daily (51%) and 2 to 5 times a week (37%) while consumers in the Midwest region rarely consume it (Figure 1). Meanwhile, once again, the high consumption including frequency of that vegetable in the Northeast region. However, in contrast to the literature, a low frequency of consumption was observed in the North region possibly due to the low proportion of interviewees from that location.

Figure 1: Frequency of coriander consumption by region.



Source: Authors.

Regarding the way of acquisition, the main places where coriander is purchased are markets which appear in 40.2% of the answers and 39.9% in grocery stores. 11.1% said they have coriander planted at home and 8.8% said they consume it from other sources. Those results corroborate the work of Costa *et al.* (2019) and Silva (2019) who stated that in the regions that are the largest producers, cultivation is carried out mainly by small and medium producers being widely commercialized in an informal way, from the producer directly to the final consumer in local markets and fairs. It is also sold in markets combined with chive sauce.

When the interviewees were asked about the use of coriander instead of another condiment, 66.2% said they do not use it that way whilst 33.8% said they use it. Among those who use it, the main seasonings replaced by coriander: parsley, cheiro verde (chives and parsley), basil, oregano and others that were pointed out. Taking into account Friedman's test, it was verified that there was a difference between the substituted spices ($p < 0.05$) leading to the Post-hoc analysis of the Nemenyi's test, according to Table 4, where the same letters mean that there were no significant differences between the results. It was found that parsley differs significantly from all other condiments therefore having greater importance as a condiment to be replaced by coriander.

Table 4: Post-hoc analysis regarding Friedman's test among the main condiments substituted by coriander.

	Parsley[a]	**Cheiro verde[b]**	**Basil[b]**	**Oregano[b]**
A type of coriander[b]	0.044*	-	-	-
Basil[b]	0.044*	1.000 [ns]	-	-
Oregano[b]	0.041*	1.000 [ns]	1.000 [ns]	-
Others[ab]	0.198[ns]	0.993 [ns]	0.993 [ns]	0.968 [ns]

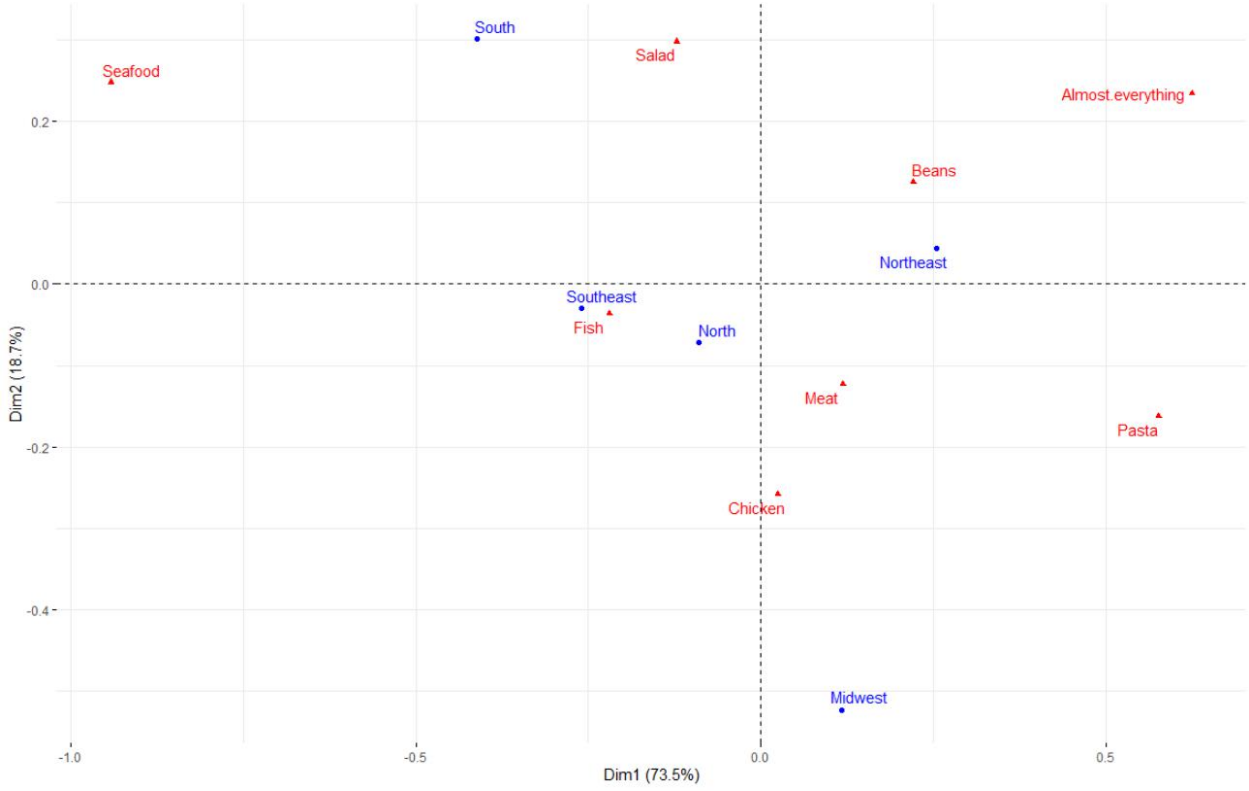
*Significant at 5% probability; [ns] not significant. Cheiro verde: chives and parsley. Source: Authors.

According to Lana's work (2020), parsley and coriander belong to the same family, Apiaceae, and have a very similar physical appearance. Along with chives, they make up one of the best-known condiments in Brazil, popularly called "cheiro

verde". However, they differ in flavor and aroma because while the first one is milder, the second one is stronger and very unique. Thus, a possible justification for the use of coriander instead of parsley is the similarity between the two vegetables and the degree of intensity in the flavor that is intended to provide when one is having a meal.

According to the results obtained, consumers make use of coriander mainly in fish (75.80%), meat (53.02%), beans (48.75%), salads (9.96%), chicken (4, 63%) and pasta (3.91%). Some consumers said they use it in almost everything (3.91%). And the type of food in which it is used is related to the region. In those data, a Correspondence Analysis was performed in order to relate the main food in which coriander is used with the regions of Brazil verifying possible associations with their local cuisine (Figure 2).

Figure 2: Correspondence Analysis between the food in which interviewees use coriander and their regions.



Source: Authors.

The Figure 2 demonstrates that in the North and in the Southeast regions, coriander is more used in fish. In the South, it is used in salads and seafood. In the Midwest, it is used in chicken, meat and pasta, and in the Northeast, it is used in beans and "almost everything" as stated by the participants. The literature mentions the use of fresh coriander leaves in various types of food especially as a seasoning for fish and seafood as it has a good flavor combination (Cardoso et al., 2016; Pinto et al., 2018). Meat, sauces, soup and salad are also cited as the main dishes in which it is used in Brazil. In Bahia, there is a traditional use of ground grain as a seasoning in various types of meat (Kaneko, 2006).

The greatest association in the Northeast region with the use of coriander in "almost everything" in food stands out from the others, corroborating data presented by other authors such as Kaneko (2006), Silva (2019) and Costa et al., (2019) who, as one can see, point to that region as the largest consumer of coriander in various types of dishes. In other regions, there was a more selective consumption, more directed to specific recipes. In the state of Amazonas, for instance, the consumption

of that condiment is being used as fish seasoning, the main source of protein for the population (Kaneko, 2006; Cardoso et al., 2016; Costa et al. 2019).

Regarding the type of processed food that interviewees would consume if it were added coriander, the most voted option was seasoned cheese with 62.4% of the answers, followed by 59.0% coxinha (a type of snack in Brazil) or with hamburgers (58.6%). Other options such as pizzas, salted pies and sausages were also mentioned. That issue points to a potential use of coriander as an ingredient in the development of new food product which is responsible for adding flavor, aroma and nutritional and antimicrobial characteristics.

Araújo *et al.* (2020) evaluated antimicrobial activity in seasoned cheese with various seasonings with the addition of coriander being interviewees' most chosen option. The researchers developed 'coalho cheese' with the addition of an aqueous extract of coriander to combat *Salmonella spp* and *Staphylococcus aureus*, analyzing the sensory and physical quality of the product. A microbial reduction was verified accompanied by small changes in physical and sensorial aspects that were not statistically significant with a positive acceptability.

Borges (2019) analyzed the sensory acceptance of 'minas frescal cheese' produced with five types of food plants: coriander, parsley, mint, moringa and ora-pro-nobis. It was also verified by the analysis aspects such as color, aroma, flavor, texture and overall appreciation. Parsley stood out as the ingredient with the best results, but cheese with the addition of coriander was well accepted especially in terms of flavor which indicates a horizon in which the condiment can be used in the formulation of food richer in nutrients in addition to adding value to the product of ranchers and rural producers.

Regarding the reasons that lead interviewees consume coriander, the main one was the flavor, totaling 78.8% of the answers. Then, it was known that health is a reason (35.3%) as well as habit with 30.0% and curiosity with 18.8%. To verify if there were statistically significant differences between the options, Friedman's test was performed on those results. After verifying that there was a difference ($p < 0.05$), the Post-hoc analysis of Nemenyi's test was performed as it is shown in Table 5.

Table 5: Post-hoc analysis in Friedman's test among the main reasons to consume coriander.

	Flavor[a]	**Health**[b]	**Habit**[b]
Health[b]	3.0e-14*	-	-
Habit[b]	4.6e-14*	1.000[ns]	-
Curiosity[c]	< 2e-16*	0.026*	0.034*

*Significant at 5% probability; non-significant [ns] as the same letters mean that there were no significant differences between the results. Source: Authors.

It was possible to observe in the Tabel 5 that flavor differs from all the other attributes and it has the greatest importance among them while health and habits do not differ from each other as they have the same statistical importance. Curiosity also differs from all of them as it has the lowest importance. Thus, flavor is still the main motivator for coriander consumption while functional and health-beneficial qualities of coriander still take a back seat.

According to Eriksson *et al.* (2012), the acceptability of coriander is polarized having a good acceptance by some consumers whilst it is not well accepted by others who claim that the vegetable has an unpleasant taste associated with soap and dirt. That aversion is due more to the aroma than to the taste associated with genetic variations in the olfactory receptors of each individual whose groups of genes contribute to the detection of a soap-like aroma in coriander. The family of genes that form the olfactory receptors bind to specific chemicals allowing us to recognize different aromas, so genetic differences in those receptors change the way each one perceives. Additionally, D'avila's work (2018) states that some genes, the most one

studied is OR6A2, can be activated by aldehydes that are in coriander causing the sensation of soap taste or insect aroma. The odor and flavor of that vegetable is influenced by several aldehydes such as unsaturated decanal and dodecanal which produce "fresh" and "fruit" odors and the 2-alkenals such as (E)-2-decenal ($C_{10}H_{18}O$) and (E)-2-dodecenal ($C_{12}H_{22}O$) (Image 5) are responsible for soapy, "greasy" or pungent odors.

Regarding nutritional and functional quality of coriander, 84.7% said they knew about it while 15.3% said they did not. The percentage of participants who claimed to know was high possibly due to the higher level of training of the interviewees. Despite that, when they were asked about the benefits they expected to have when consuming coriander with the options presented in the question, the statement "I don't know the benefits of coriander" stood out with 64.8%. The other options appeared with similar results: digestive activities 25.9%; antioxidant capacity 24.1%; anti-inflammatory capacity 23.8%; antimicrobial property 13.9%; the hypoglycemic action 13.3%. It is important to say that it was possible to select several options.

Such data agree with Carvalho's *et al.* (2013) works who state that a significant portion of the population associates vegetables and fruits in general as healthy food with good nutritional quality without having knowledge about the functional properties of some of them. Friedman's test was also performed on those data. A significant difference was verified between the options ($p < 0.05$) followed by the Pot-hoc analysis of Nemenyi's test (Table 6).

Table 6: Post-hoc analysis in Friedman's test on knowledge of the functional aspects of coriander.

	Don't know[a]	**Digestive activities [b]**	**Anti-inflammatory[bc]**	**Antioxidant[b]**	**Antimicrobial[cd]**
Digestive activities[b]	2.5e-10*	-	-	-	-
Anti-inflammatory[bc]	1.2e-11*	1.00 [ns]	-	-	-
Antioxidant[b]	1.7e-11*	1.00 [ns]	1.00 [ns]	-	-
Antimicrobial[cd]	4.4e-14*	0.27*	0.52 [ns]	0.49*	-
Hypoglycemic[d]	4.1e-14*	0.22*	0.47*	1.00 [ns]	1.00 [ns]

* Significant at 5% probability; non-significant [ns] as the same letters mean that there were no significant differences between the results. Source: Authors.

The Table 6 evidence that the option "I don't know the benefits" is different from all the others and it is the one that has the greatest importance. Then, we have a second group with digestive activities, anti-inflammatory and antioxidant capacity which do not differ from each other. Finally, a third group with antimicrobial and hypoglycemic action which do not differ and it is less important.

In this way, it was possible to observe that despite claiming to know the functional capacity of coriander, there is still a great lack of knowledge about its beneficial actions. Associated with that, we verified the data already mentioned whose greatest motivation for consumption is the taste and not its health benefits.

Therefore, it is important to develop new studies that explore the functional properties of coriander analyzing its actions and disseminating scientific information about them. In addition to being an excellent condiment, coriander can contribute to a more nutritious and functional diet. Annunziata *et al*. (2015) also concluded that the lack of information can be a barrier to the consumption of functional foods, especially for the elderly.

4. Conclusion

Although there is still a portion that strongly rejects coriander, it is consumed by a significant number of people. The main consuming regions are the Northeast and the North as it was expected.

Interviewees sociodemographic factors did not influence the consumption of coriander.

The North and the Southeast regions are the ones which use coriander in fish whereas the South region uses it more in seafood. The Midwest in chicken, meat and pasta and the Northeast in beans and almost everything. And it is often used as a substitute for parsley.

The main motivator for coriander consumption is the taste. Although consumers claim to know the nutritional and functional quality of coriander, they are still unaware of the main beneficial characteristics of the vegetable. In this way, the relevance of carrying out studies focused upon those points seek to disseminate more information about the benefits of that vegetable.

Consumers showed an intention to buy industrialized products with the addition of coriander, mainly seasoned cheeses and snacks. That demonstrates the possibility of developing new products that associate the beneficial characteristics of coriander with sensory aspects.

Despite the consumption of coriander being motivated by the flavor, the development of industrialized products with this condiment and the dissemination of its benefits can increase its com consumption and consequently of a functional ingredient, bringing benefits to consumers.

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