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Between the role of dietary intervention based on scientific evidence and the dissemination via WhatsApp of hoaxes related to superfoods: A descriptive study on the top 100 'magical ingredients' with healing powers for COVID-19

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Background of the study

Moreno-Castro, C., Vengut-Climent, E., Cano-Orón, L., & Mendoza-Poudereux, I. (2021). Exploratory study of the hoaxes spread via WhatsApp in Spain to prevent and/or cure COVID-19. *Gaceta Sanitaria*, 35(6), 534-541.

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Methodology



Sample: 126
hoaxes related to
prevention/or cure
of COVID-19

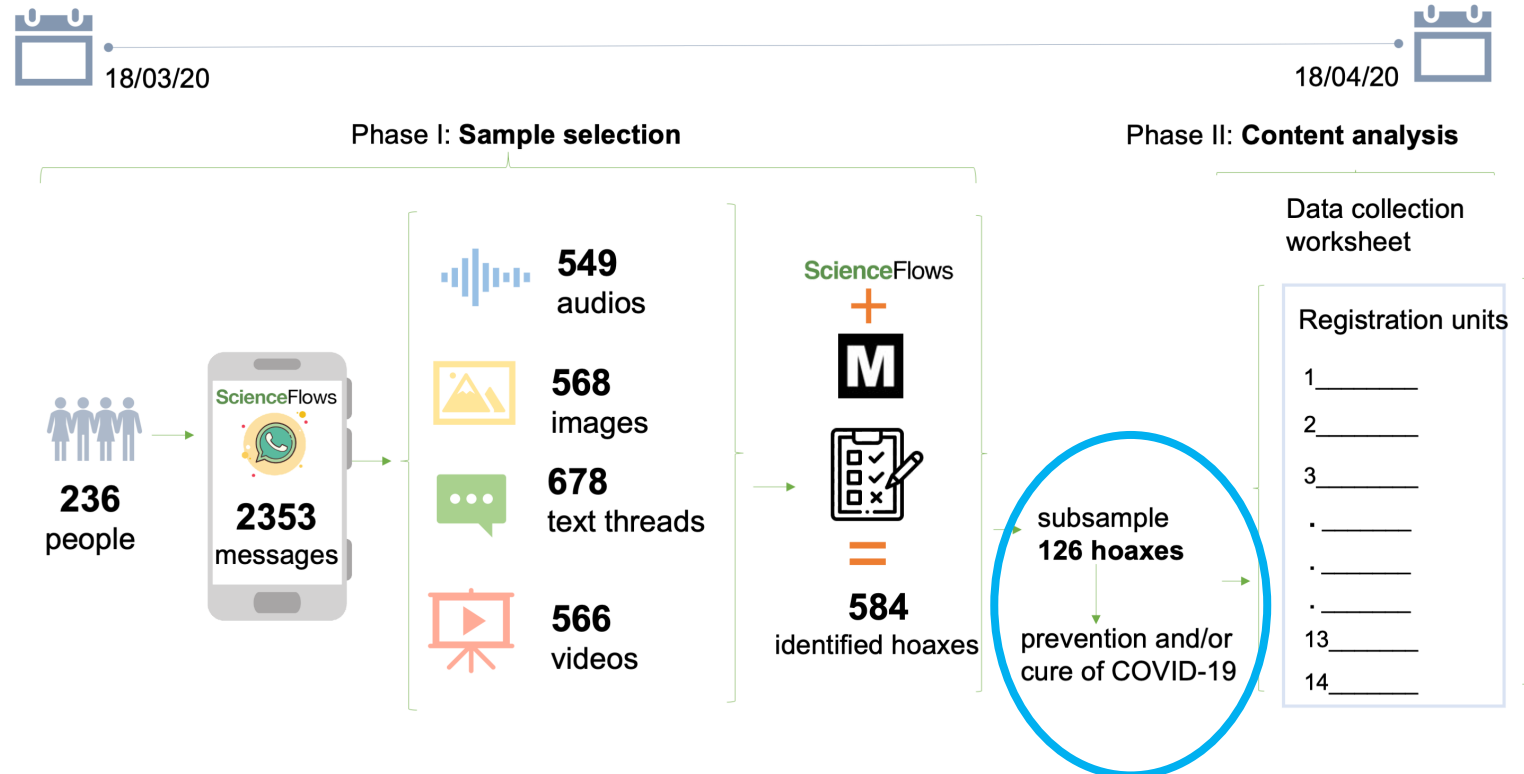


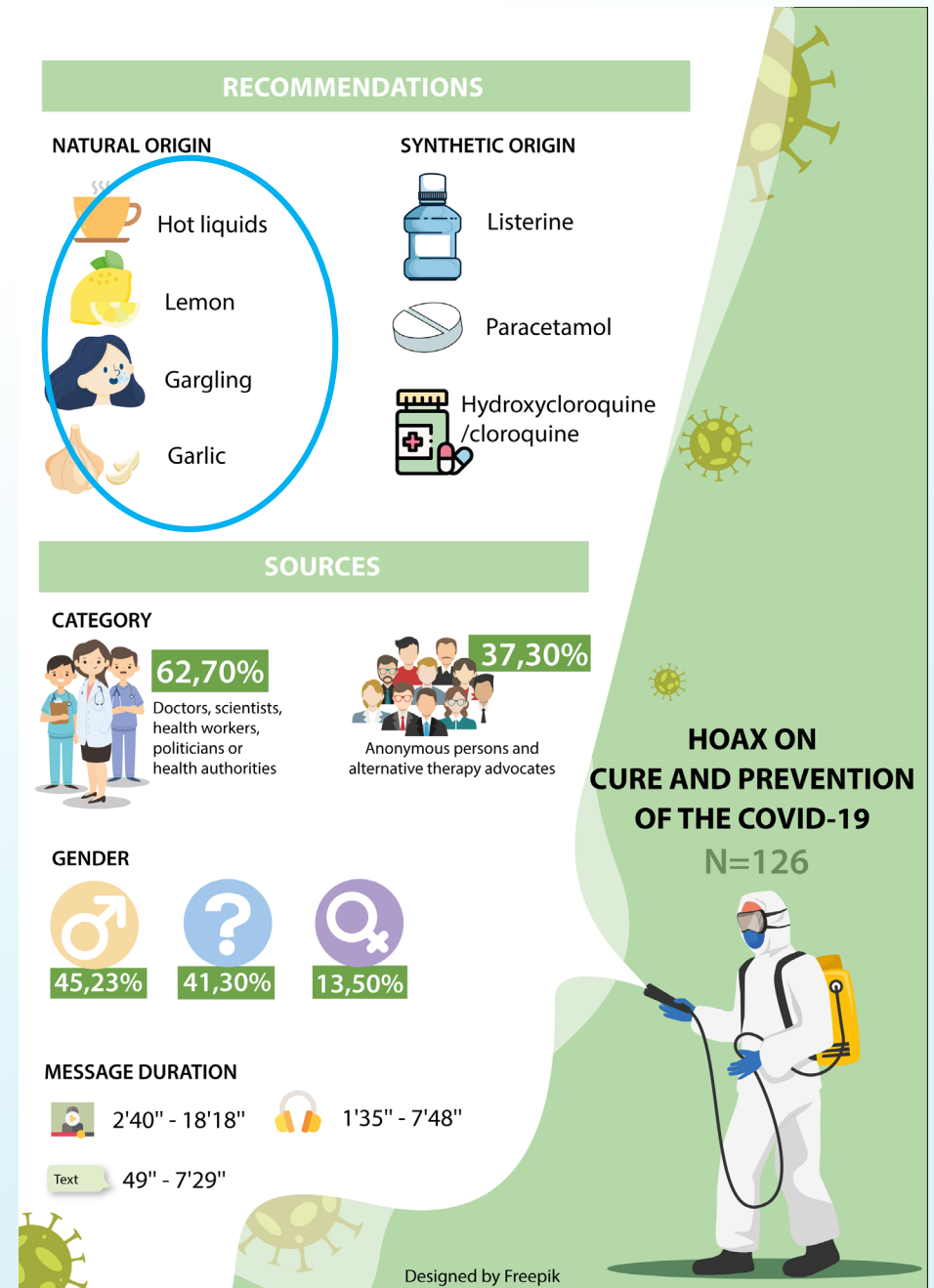
Figure 1. Sample selection and study method. The diagrama shows the two phases of research. **Phase I:** Selection of subsample of 126 hoaxes. To reach this subsample of hoaxes, it was designed a participatory research in which 236 people voluntarily sent 2353 documents, which were labeled one by one and validated as hoaxes through the media's database *Maldita.es*, whose validation methodology is collected on the website: <https://educa.maldita.es/metodologia-y-herramientas-de-verificacion/>. **Phase II:** Exploratory study of each of the hoaxes applying standardised content analysis (Krippendorff, 1990), through data collection worksheet with 14 registration units. Averages and medians of quantitative fields were extracted

New approaches to food claims

21,6%
BULOS
SOBRE
CURA Y
PREVENCIÓN
DE LA
COVID-19



We identified around 22 % of the hoaxes received during the lockdown period were related to the cure or prevention of COVID-19



Then, let's study what **kind of food ingredients** were promoted from the hoaxes spread via WhatsApp

FINDINGS ABOUT NATURAL PRODUCTS	Times hoaxes
Drinking hot liquids such as teas, broth, or water	24
Warm water with lemon	24
Garlic, orange with zest, chamomile, white onion, eucalyptus leaf and ginger broth	24
Water, lemongrass, elderflower, ginger, black pepper, lemon peel, pure honey, yellow lemon juice broth	24
Vegetables broths (cabbage, arracachacreole celery, carrot, celery, parsley, turmeric)	24
Aromatic infusions Herbal teas (rosemary, thyme, oregano, onion, peppermint, and chamomile) with cinnamon and cloves	24
Garlic broth	24
Infusion with herbal teas containing natural antivirals (garlic, ginger, propolis, mint, lemon balm, rosemary, cinnamon, turmeric, fruits with vitamin C)	24
Warm water with lemon, tea, lemon ginger elixir, salt, and brown sugar	24
Lemon (in multiple forms: juice, gargles, broth, infusions)	21
Gargling with antiseptics, disinfectants, or antibacterials. Recommendations included gargle gargling with water and vinegar and / or salt and / or lemon; baking soda and lemon; only baking soda (to create alkalinity); even with vitamin C, warm water, vinegar and a little pinch of baking soda	20
Garlic (in multiple forms: whole, raw, in broth, whipped – with watercress)	19
Taking a sip of water every 15-20 min.; drinking a lot of water	14
Ginger (in multiple forms: broth, infusion, vapours, under the armpit to lower fever, chewed, etc. Its inflammatory effect is was even named mentioned)	13
Fruits, vegetables, legumes, and nuts (sweet potato, green vegetables, spinach, peppers, citrus fruit, berries, carrots, red peppers, broccoli, almonds, lentils, spinach, pumpkin seeds, coconut oil)	12
Following a diet with based on alkaline foods (either lemons, limes, avocados, garlic, mangos, tangerines, dandelions, pineapple, and or oranges; fruits, vegetables and seaweed; water with baking soda, a glass of lemon water, apples, cinnamon millet, green leafy vegetables; or by eatingconsuming chamomile, green tea, soy milk, vegetable protein, beans and wheat)	11
Sunbathing (sun exposure) (some messages specifically point to obtaining underscored the importance of vitamin D)	10
Baking soda (gargling, hot drinks or for brushing one’s teeth)	10
Onion (in multiple forms: whole without peeling, vapours, inhaled, broth)	9
Dairy produce (yoghurt, ghee, milk, and cheese)	6
Zinc, either as a supplement or in food (eating fruits and vegetables or, eating a head of garlic to increase the zinc absorption and it is even recommended to eat Reishi mushrooms)	6
Drinking alcohol	5
Drinking hot lemon and with baking soda	5
Inhaling water vaporsteam	5
Eating proteins (mainly meat and fish)	5
Eating Consuming foods rich and drinks rich in interferon (it is specifically recommended to drink chamomile, green tea, thyme, onion, garlic, and celery; or garlic, onion, zucchini courgettes, oranges, lemons, apple sauce, bananas or plantains, potatoes, lentils, black beans, plain yoghurt, and carrot black tea)	4
Turmeric	3
Honey preparations	3
Having eucalyptus branches or steamers with oil or eucalyptus smoke in the rooms	3
Eating bananas	3
Drinking an infusion of neem leaves	2
Drinking dandelion tea, chamomile tea, and green tea	2
Eating Consuming baking soda, apple cider vinegar, pineapple vinegar, and organic cane	2



Physicians talk about magic ingredients



El Plátano Cura el COVID-19

El Plátano contiene una lectina que es un potente anti-COVID19 que bloquea la entrada celular del virus.

Es el potasio en donde se ha descubierto un antígeno resistente al virus del COVID-19 que lo elimina del sistema humano.

Su contenido protéico es discreto (1,1/100 g) y la presencia de grasas casi nula (0,2 g/100 g).

Además, está exento de colesterol.
Es una fruta muy rica en potasio (382 mg/100 g) y magnesio (36 mg/100 g).



Hugo López-Gatell
Secretaría de Salud del Gobierno de México

<http://www.canifarma.org.mx/>

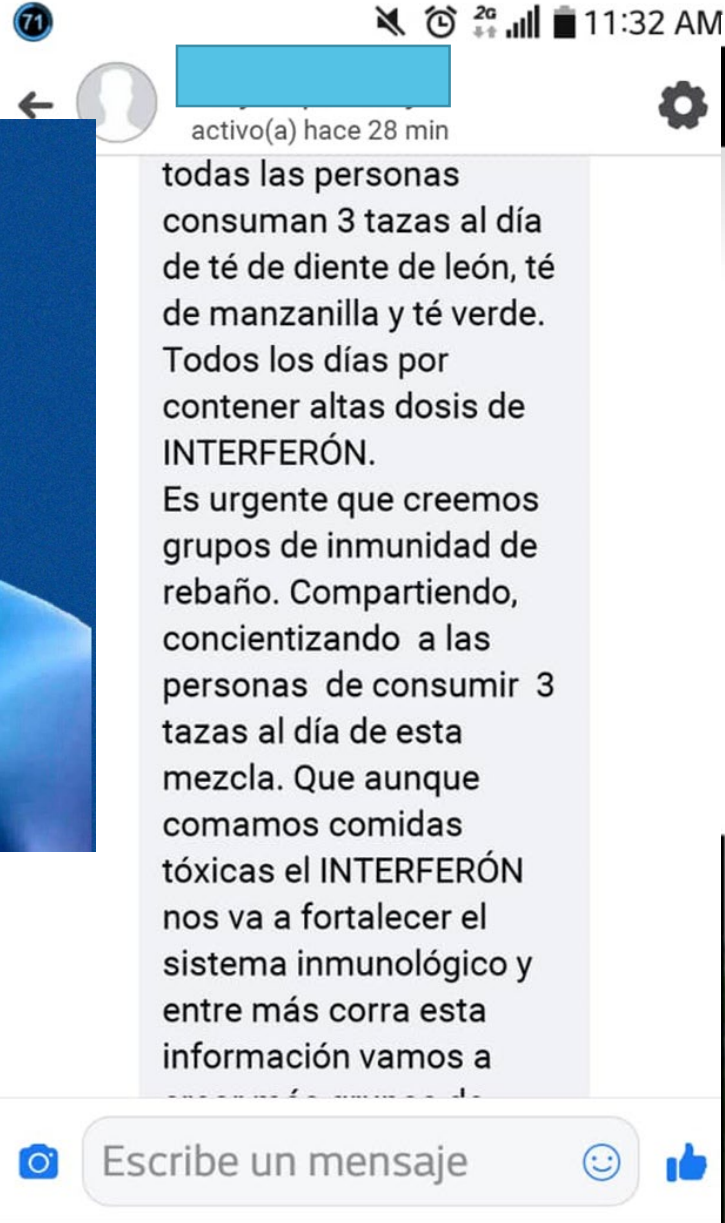


(Fake) Recommendations from the army, the WHO and government's health services



Hoaxes about the therapeutic power of the lemon, salt, green tea...

El Coronavirus antes de llegar a los pulmones permanece en la garganta durante cuatro días y en este momento la persona comienza a toser y a tener dolores de garganta. Si bebe mucha agua y hace gárgaras con agua tibia y sal o vinagre, elimina el virus. Difunda esta información porque puede salvar a alguien con esta información.



Médicos de la universidad de la Habana Cuba confirmaron y demostraron que el CoronaVirus (COVID -19) no se desarrolla en ambientes donde se usa *el 1,8 Epoxi -p mentano* que es el componente anti virucida, antiséptico y bactericida del *Eucalipto* más conocido como *Eucalipto*.

En una serie de pruebas en ambientes aspersados con vapor caliente de Eucalipto, este virus modificado no se desarrolló y no toleró los agentes virucidas, antisépticos y bactericidas de este componente muriendo por completo.

También determinó este resultado, el calor del vapor generado por las vaporeras.

Recomiendan tener ramas de Eucalipto en los cuartos, o vaporeras con aceite de Eucalipto o ramas de éste, para prevenir el COVID -19.

~~ fuente Internet ~~



Top 100 'magical ingredients' with healing powers for COVID-19

1	Alcoholic beverage
2	Algae
3	Almonds
4	Apples
5	Arracacha creole
6	Artemisia annua
7	Astragalus
8	Avocados
9	Bananas
10	Bay leaf
11	Beans
12	Beetroot
13	Berries
14	Black pepper
15	Broad bean
16	Broccoli
17	Broth
18	Brown sugar
19	Cabbage
20	Carrot
21	Cashew
22	Celery
23	Chamomile
24	Cheese
25	Chickpea

26	Chive
27	Cinnamon
28	Citrus fruit
29	Cloves
30	Coconut oil
31	Coffee
32	Corn
33	Dandelions
34	Detox Juice
35	Elderberry
36	Elderflower
37	Eucalyptus
38	Eucalyptus leaf
39	Fish
40	Garlic
41	Ghee
42	Ginger
43	Green tea
44	Green vegetables
45	Hazelnut
46	Honey (pure)
47	Horsetail
48	Houttuynia cordata
49	Kiwi
50	Legumes
51	Lemon

52	Lemon balm
53	Lemon juice
54	Lemon peel
56	Lemon water
57	Lemongrass
58	Lentils
59	Liquorice
60	Magnesium chloride
61	Mangos
62	Meat
63	Milk
64	Mint
65	Moringa
66	Neem leaves
67	Nuts
68	Onion
69	Orange (with zest)
70	Orange juice
71	Oranges
72	Oregano
73	Parsley
74	Peppermint
75	Pineapple
76	Pollen (tablespoon)
77	Potatoes

78	Propolis
79	Pumpkin seeds
80	Red peppers
81	Reishi mushrooms
82	Rosemary
83	Salt
84	Soda
85	Soy milk
86	Spinach
87	Stonecrop
88	Sweet potato
89	Tangerines
90	Thyme
91	Turmeric
92	Vinegar
93	Water
94	Wheat germ
95	Yoghurt
96	Zucchini courgettes

Any ingredients to which fake news attributed magical properties were:

Findings

Lemon (in juice)

Fake news: "Lemon juice has anti-covid-19 vitamins".

Garlic, onion and ginger

Fake news: "Consume garlic, lemon, ginger and onion soup promotes post-covid-19 get over".

Bananas

Fake news: "The banana cures covid-19"

Natural plants in infusions

Fake news: "Drinking hot beverages is effective against covid-19."

Water, salt and vinegar

Fake news: "Drinking water every 15 minutes and gargling with salt and vinegar protects against covid-19".

Conclusions

- 95% of the ingredients or foods related to superpowers to prevent or cure covid-19 were fruits, vegetables, legumes, nuts, and herbs.
- 5% about dairy products, fish, meat, and alcoholic beverages.
- Hoaxes cited public organizations such as WHO, health ministries of different countries, and several physicians and health practitioners. Once fact-checkers contracted the fake news, those institutions used to give credibility, in 95% of the cases did not authorize the story.
- No one of the hoaxes cited the European Food and Safety Authority (EFSA).
- Finally, no one of the hoaxes were based on scientific evidence about the ingredient that was being promoted.



Some of the health claims disseminated through these hoaxes and fake news may contain a degree of truth, but the underlying statements are categorically wrong.

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Thanks for your attention!

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