

Korean Indigenous Knowledge of Health in Korean Drama Jewel in The Palace

Rizki Nurislaminingsih^{1*}, Edwin Rizal¹, Arido Laksono²

¹Faculty of Communication Science, Universitas Padjadjaran, Bandung, Indonesia

²Faculty of Humanities, Universitas Diponegoro, Semarang, Indonesia

*nurislaminingsih@unpad.ac.id

Received: 25 October 2024; Revised: 1 December 2024; Accepted: 1 December 2024

Available online: 7 January 2025

How to cite (APA): Nurislaminingsih, R., Rizal, E., & Laksono, A. (2024). Korean Indigenous Knowledge of Health in Korean Drama Jewel in The Palace. *HUMANIKA*, 31(2). <https://doi.org/10.14710/humanika.v31i2.67692>

Permalink/DOI: <https://doi.org/10.14710/humanika.v31i2.67692>

Abstract

Korea is famous for the creative industry such as drama which set in modern times and the kingdom era (saeguk). In the saeguk drama, Korean Indigenous knowledge is also shown. It represents their traditional life, such as livelihoods, how to make tools, survive in four seasons, how to farm or garden, and also about health. One of the saeguk with the theme of Indigenous knowledge is Jewell in the Palace, with the background of the lives of physicians and healers in the Joseon era. This study aims to identify the health themes in the drama text. Therefore, we use qualitative content analysis. The results of the study show that in Jewell in the Palace, there are twelve main themes about health: the relationship between body changes and health, herbs, flowers, acupuncture, healthy drinks, environmental influence on health, benefits of plants for health, spices, fruits, benefits of animals for human health, healthy tips, and natural ingredients for skincare. The conclusion is that the Korean drama Jewell in the Palace has main themes and sub-themes about health based on their characteristics, types of plants, names of animals, and the benefits. The results of this study can be a source of reference for further research from several disciplines: cultural science (cultural and media studies), health (traditional medicine), education (the effectiveness of drama as a source of learning about Indigenous knowledge), and research studies to analyze the use of entertainment media (films, movies, comedy series, and dramas) as sources of research data..

Keywords: korean drama; jewel in the palace; Dae Jang Geum; indigenous knowledge; health

Introduction

Indigenous knowledge represents the intelligence of local communities. They have the knowledge, abilities, expertise, and skills to support daily needs such as clothing, food, houses, and medicines. This knowledge is also possessed by the Korean people. They master the art of traditional medicine and healing inherited from their ancestors which is still maintained today. Over time, this knowledge has been packaged better. In the modern era, they use videos to record it. The background of the video is also increasingly diverse, such as live recordings, animations, or in drama settings. Dramas set in people's lives (such as films, movies, or dramas) are enjoyable viewing. The knowledge conveyed by the characters feels easy to understand because it flows with the theme and is similar to reality in everyday life.

Entertainment media in the form of films, movies, television shows, or dramas have now been recognized as one of the sources of research data. Although entertaining, these shows still contain elements of knowledge. Darmadji (2022) uses a critical discourse research method that positions films as texts that represent socio-cultural in the reality of society. We will gain knowledge about the culture of society in films because they reflect their daily lives.

The data in this study are in the form of scenes, use of language in dialogue, and text in the film. Analysis of entertainment media to examine knowledge about culture is found in the research of Mulyadi & Prasetyaningtyas (2022) who studied documentary videos on YouTube. The results of the analysis show that there are examples of elements of Japanese culture in the form of food (spices and ingredients), technology, architectural knowledge, traditional house construction, and traditional games.

Fedorov & Friesem (2015) have analyzed several kinds of literature that discuss films, television shows (comedy, detective), science fiction movies, and melodramas that have educational elements, then get themes about information, knowledge, pedagogy, curriculum, and educational models. Films, movies, melodramas, or other television shows not only function as entertainment media but also media for information literacy and gaining knowledge.

One of the Korean dramas that discusses indigenous knowledge is *Jewel In The Palace* with the main character Dae Jang Geum, the first Korean woman to become a great healer in the Joseon Kingdom. This drama teaches us about indigenous Korean knowledge, especially the art of traditional medicine. This is as stated by Jeong et al. (2017) that *Dae Jang Geum* is a drama set in pre-modern Korean history. Respondents in their study admitted to gaining knowledge about local Korean knowledge. The historical elements packaged in the form of this drama sparked the interest of people in Asian countries including Indonesia in costumes, food, recipes, and knowledge about medicine.

The result research of Jeong et al (2017) became our inspiration to conduct further research on the theme of Korean health knowledge from the drama. Yin & Ko (2014) acknowledged that traditional Korean medicine had existed since the royal era, for example in the Joseon dynasty. The healers and nurses were even familiar with the terms anatomy, physiology, etiology, qigong, and herbal recipes. Korean medicine is unique with the principle of the "Four Constitutions" (Sasang constitution) and Saam acupuncture. Now these treatment systems have become part of the Korean national health system. Kim et al. (2019) explained that the Sasang Constitution is a traditional typological constitution in Korean medicine. This constitution classifies people into four types, "soyangin", "soeumin", "taeyangin" and "taeumin", based on the eum-yang theory (yin-yang in Chinese). Thus, the purpose of this study is to identify and describe indigenous health themes in the Korean drama – *Jewel in The Palace*.

Method

This study aims to obtain the theme of Korean Indigenous Knowledge of Health In “*Jewel In The Palace*” Korean Drama therefore we used qualitative research with a content analysis approach. According to Vaismoradi et al. (2016), content analysis is an approach in qualitative that aims to describe findings. Researchers choose a theme (if necessary plus details of subthemes) and describe each themes and subthemes. Materials for data analysis consist of all types of data that can be transformed into textual formats; interview transcripts, participant observation notes, documents, literature, artifacts, photos, text in videos, websites, emails, and so on. Bengtsson (2016) explains that qualitative content analysis can be used on all types of written texts such as interview texts, observation results, images, or films. Researchers analyze the text sources to obtain data in the form of words and themes.

We got the data for this research from the text of the conversation in the drama. This is as stated by Brennen (2017) that the text in printed works (books, newspapers, magazines), online media (websites, podcasts, games), videos (films, television shows, music), photos, or

advertisements, can be used as data to create meaning. This means the content of each media contains meaning. Meaning is obtained from text that is clearly written or implied in the media that we see, hear, and read. As a limitation, qualitative researchers do not study text to calculate or predict anything. Qualitative researchers analyze text to get themes and then describe them.

In this study, we identified keywords (herbal names, environmental impacts on health, health tips, and so on) found in the drama text and then grouped them as shown in the table. We described each of the themes and subthemes to make their meaning clear. Main themes were determined based on general characteristics such as the relationship between body changes and health, herbs, flowers, acupuncture, kind of healthy drink, environmental influence on health, benefits of plants for health, spices, fruits, benefits of animals for human health, healthy tips, and natural ingredients for skincare. Sub-themes are the explanations, details and examples of each main theme. We strengthened our descriptions with the results of literature studies.

According to Asan & Montague (2014), qualitative research can take data from videos. Researchers conduct thematic analysis to take any themes in the video and then describe them. The advantage of video as a data source is its consistency. We will hear the same words or sentences and they will not change because they have been recorded. Researchers can watch the video repeatedly to get the themes and subthemes in as much detail as possible. Vaismoradi et al. (2016) explained that themes in texts can be used as data sources because they have many meanings. Therefore, identification is needed to select themes. The selected themes are grouped into main themes and subthemes.

This research method was conducted in accordance with the four stages of qualitative content analysis from Vaismoradi et al. (2016), including initialization (reading text, highlighting important points, grouping points), construction (translating, transliterating, defining, describing), rectification (relating themes to established knowledge), and finalization (developing the storyline). In the initialization stage, we watched the drama Jewell in The Palace and read the subtitles repeatedly (4 times) to get several health themes. Those are 1). The Relationship between Body Changes and Health., 2). Herbs., 3). Flowers., 4). Acupuncture., 5). Healthy Drink, 6). Environmental Influence on Health., 7). Benefits of Plants for Health., 8). Spices., 9). Fruits., 10). Benefits of Animals for Human Health., 11). Healthy Tips., 12). Natural Ingredient for Skincare.

We did the construction by giving examples (ingredients, plant names, animal names, flowers, herbs, skin color) along with brief descriptions. We completed the rectification by citing the results of other studies to support these examples. We did the finalization by narrating the research results according to the citations (literature study results) to bring out the scientific side of each theme. Thus, even though the data in this study comes from drama, it will remain scientific.

Result and Discussion

In the Korean Drama – Jewell In The Palace there are several main themes about health. The main theme has sub-themes that make it easier for us to understand the meaning of the theme and its examples. More complete information can be seen in table 1.

Table 1. Main Themes and Sub-Themes

Number	Main Themes	Sub-Themes
1	The Relationship between Body Changes and Health	Symptoms of Disease in The Body
2	Herbs	Names and the benefits
3	Flowers	Names and the benefits
4	Acupuncture	Benefits
5	Healthy Drink	Names and the benefits
6	Environmental Influence on Health	Names and the benefits
7	Plants for Health	Names and the benefits
8	Spices	Names and the benefits
9	Fruits	Names and the benefits
10	Animals for Human Health	Names and the benefits
11	Healthy Tips	Tips
12	Natural Skincare	Ingredients

Source: Data Processing Result (2024)

We give explanations for the twelve main themes and sub-themes based on their characteristics, types of plants, names of animals, examples of benefits, and other examples mentioned in the dialogue in the drama. We support this explanation with the results of scientific research from experts that have been published. More details can be seen in Tables 1 to 13.

The Relationship between Body Changes and Health

We can recognize a person's health condition based on changes in the body such as loss of sense of taste, the color of the face, mood, weak pulse, and pain in the soles of the feet.

Tabel 2. Body Changes and Health

The Relationship between Body Changes and Health		
Symptoms	Explanation	Supporting Scientific Articles
Loss of sense of taste	Caused by fever, malnutrition, drinking poisonous herbs	Risso et al. (2020)
The colour of the face	Blue : gout, extravasated blood, or convulsions. Yellow : weakened immune system, bacterial infection, jaundice White : weakened immune system, hemorrhage, exhaustion Black : weakened lower organs, prolonged pain, internal bleeding Red : fever, severe symptoms signify high temperature, mild symptoms signify low energy	Jones et al. (2016)
Mood	Feelings of happiness, anger, and sadness are related to heart health. The feeling of fear is related to the kidneys and stomach. The feeling of surprise is related to yin and yang.	Lee et al. (2017)
Weak pulse	Lack of body fluids or fever	Rabasová (2017)

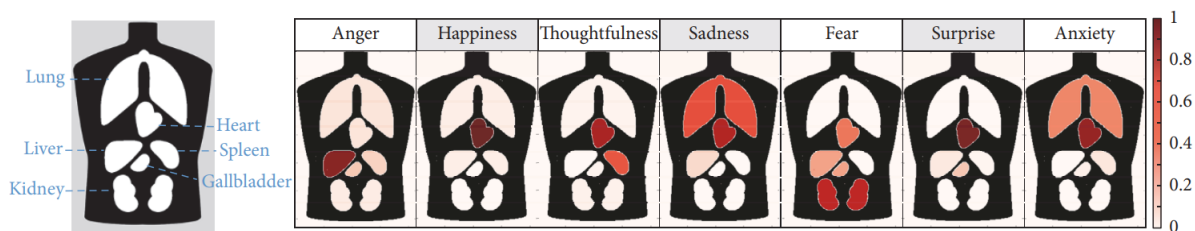
Pain in the soles of the feet Signals indicate there is disease in certain parts of the body, such as the stomach or spleen. Jin-Sheng (2009)

Source: Data Processing Result (2024)

Sometimes we assume that the function of the sense of taste is limited to recognizing delicious and bad food. We have not realized its function as an indicator of body health. In fact, the reduced ability to recognize the taste of food is an indication of health problems such as fever, malnutrition, and even poisoning from certain herbs. According to Risso et al. (2020), our sense of taste provides sensory information from what we eat, resulting in the perception of sweet, bitter, bland, salty, sour, savory, or umami stimuli. Taste disorders (dysgeusia) result in the loss of taste function, either completely (ageusia), partially (hypogeusia), or even in the form of excessive taste sharpness (hypergeusia). The causes can be genetic factors, the environment, aging, chemicals, drugs, trauma, high doses of alcohol, smoking, poor oral health, problematic teeth, malnutrition, respiratory tract infections, or due to viruses.

Jones et al. (2016) argue that skin color can also be a predictor of health. Variations in facial skin color are related to health. For example, bright red facial areas (periorbital and cheeks) and fresh yellowish body skin indicate a healthy body. However, if the face and entire body look pale, it indicates a health problem. Likewise changes in mood are expressed on the face. We often assume that changes in expression only represent feelings. Differences in expression affect the health of internal organs. Lee et al. (2017) explain that a person's emotions are related to organs such as the liver (happy, angry, concerned, sad, afraid, surprised, anxious), spleen (concerned), lungs (sad, anxious), kidneys (afraid), and gallbladder (surprised). A more complete illustration can be seen in the following image. The more intense the red color, the stronger the effect of emotions on the organs of the body. An illustration of the relationship between mood and organs of the body can be seen in Figure 1.

Figure 1. The Relationship Between Mood and Organs



Source: Lee et al. (2017)

We admit to being dehydrated when we are dehydrated, have a fever, or have dry skin. But in reality, the impact is not limited to that. A weak pulse also indicates a lack of fluids. Rabasová's research (2017) proves that dehydration affects increased body temperature, dry skin, decreased pulse volume, changes in skin color (pale/marbled), decreased urine production, decreased tongue turgor, constipation, sunken eyes (sunken eyes, circles), sunken fontanelle, increased hematocrit, cold extremities, mental instability (easily restless), changes in skin turgor, dyspnea (heavy breathing), cramps, dry mucous membranes, bloating, decreased blood pressure, drowsiness, and fatigue.

Lack of water will also interfere with the kidneys and lead to heel pain. The relationship between the kidneys and heel pain has also been recognized by TCM (Traditional

Chinese Medicine). The work of the kidneys in processing nutrients will affect bone health. The heel is part of the bone. If the kidneys are healthy, the bones will also be healthy. Pain in some parts of the body can also be caused by kidney, yin-heart, and blood deficiency. The pathogenic changes in this patient affect the two zang-fu organs, the kidneys, and the heart. Heel pain appears when waking up (feet touch the ground) and gets worse when walking. Great mental pressure in work and daily life also plays a role in pain problems in some parts of the body such as lower back pain, pain in the soles of the feet, and pain in the knee joints when climbing stairs (Jin-sheng, 2009).

Herbs

Several plants contain herbal benefits. The examples are garlic, atractylodes rhizome roots, ginseng, mugwort, tetragonia, madder, elecampane, and sophora flavescens aiton.

Table 3. Herbs

Herbs		
Name	Benefit	Supporting Scientific Article
Garlic	for hypertrophy	Bradley et al. (2014)
Ginseng	Restore energy	Zhang et al. (2023)
Atractylodes rhizome roots	Relieve diarrhea	Wang et al. (2019)
Elecampane	Relieve diarrhea, contagious illnesses prevention	Singh et al. (2022)
Tetragonia	for stomach	Lee & Kang (2014)
Mugwort	Reduce fever	Ekiert et al. (2021)
Madder	for vomits blood or hemorrhage	Gao et al. (2023)
Sophora flavescens aiton	can be herb and poison	Lin et al. (2015) Jiaqi et al. (2021)

Source: Data Processing Result (2024)

Garlic is part of cooking spices in many countries (including Korea) because it makes food taste good. Behind its fragrance, garlic can also function as an herb for hypertrophy. Bradley et al. (2016) explained that raw garlic contains active metabolites of allicin which can reduce pressure and ventricular hypertrophy. Garlic oil contains polysulfides to reduce cardiac hypertrophy. The results of research by Zhang et al. (2023) show that ginseng is one of the ingredients for making Chinese tonics. Ginseng is also useful for supporting exercise because it regulates energy expenditure better, thus saving the use of glycogen and protein during exercise. Ginseng is also effective in relieving fatigue and increasing energy after activity.

One of the plants that can be used as an ingredient with ginseng is atractylodes macrocephala Koidz. (AM). The combination of the two is useful for curing diarrhea. According to Wang et al. (2019), atractylodes macrocephala Koidz. (AM) when combined with Panax ginseng C. A. Mey. (PG) will have a good effect in supplementing Qi and strengthening the spleen. A bad spleen will make us easily sick including diarrhea. The combination of AMO (Atractylodes Macrocephala Essential Oil) and PGS (Panax Ginseng total Saponins) will also relieve diarrhea due to 5-FU and intestinal pathology. According to Singh et al. (2022), Indian elecampane Extract (roots and rhizomes) is often used for diarrhea, abdominal pain, pain in the upper body, especially between the neck, and shoulders.

Tetragonia tetragonoides (Pall) T. *tetragonoides* is also a plant that can be herbal, especially for the stomach. Lee & Kang (2014) admit that it has good antioxidants so it is useful for asthma, migraines, gastric ulcers, gastric cancer, septicemia, and gastritis.

A plant that is also easily found in Korea is mugwort. One of its benefits is to reduce fever. Ekiert et al. (2021) argue that mugwort (*Artemisia annua* L.) has been used in Asian medicine for jaundice, dysentery, malaria, tuberculosis, wounds, hemorrhoids, autoimmune, fever (summer and yin deficiency), and virus and bacterial diseases. Traditional medicine in China and India utilizes all parts of the plant from flowers, leaves, stems, seeds, and essential oils. We can also use madder to cure pain in the internal organs, especially vomits blood or hemorrhage. It has benefits for blood (cooling, bleeding, circulation, hemoptysis, and postpartum stasis), vomiting blood, menstruation, rheumatism, abdominal pain, and fall injuries (Gao et al., 2023). One of the plants that can strengthen the body's immune system is *sophora flavescens*. However, this plant also has the potential to be toxic to the body if used incorrectly. The benefits of *sophora flavescens* are explained in Lin et al. (2014) that it contains high antioxidants so it is good for health. On the other hand, the research results of Jiaqi et al. (2021) show that Kurarinone (111) and (-)-sophoraflavanone G (123) in *Sophora flavescens* have toxic effects on human liver cells.

Flowers

Some flowers can be consumed and provide health benefits such as agrimony and dayflower.

Table 4. Flowers

Flowers		
Name	Benefit	Supporting Scientific Article
Agrimony	for stoping bleeding	Wen et al. (2022)
Dayflower	for diabetic	Kim et al. (2022)

Source: Data Processing Result (2024)

Agrimonia pilosa Ledeb. (APL) is widely found in China, Korea, and Japan. It stops bleeding, wounds, itching, detoxification, preventing malaria, carbuncles, and dehydration. It can be tonic to treat hemoptysis, vomiting blood, bleeding, and bloody dysentery (Wen et al., 2022). According to Kim et al. (2022), dayflower or *C. communis* L. is a herb for sore throat, obesity, acute enteritis, diabetes, and diuretics in Korea since the Middle Ages. In Japan, this plant is a medicine for fever and diuresis.

Acupuncture

Needle puncture at several points of the body will calm the mind, reduce intestinal inflammation, became anesthesia (for toothache) and cure the beriberi.

Table 5. Acupuncture

Benefits of Acupuncture	Supporting Scientific Article
Calming the mind	Vique-Sánchez & Galíndez-Fuentes (2021)
Intestinal inflammation	Song et al. (2019)
Acupuncture for toothache, like anesthesia, does not hurt when the teeth are pulled out.	Kumar & Tewari (2023)

Acupuncture for beriberi disease. Choi (2022)

Source: Data Processing Result (2024)

The benefits of acupuncture to calm the mind are recognized by Vique-Sánchez & Galíndez-Fuentes (2021) as a complement to psychotherapy or pharmacotherapy. Patients will feel calm after therapy. Neiguan acupuncture point (Pc6) regulates energy dynamics and mental disorders. Shenmen (H7) to cleanse the heart, and calm the soul and mind when afraid, sad, or anxious. Song et al. (2019) explained that it is useful for gastrointestinal diseases to reduce inflammation by increasing vagal activity in intestinal inflammation. It is also for regulating intestinal dysbiosis, intestinal barrier function, visceral hypersensitivity, intestinal motor dysfunction, and pain.

Kumar & Tewari (2023) explained the benefits of acupuncture in dental procedures to reduce nerve block failure in patients with irreversible pulpitis, control intraoperative pain, reduce patient anxiety during dental procedures, and minimize endodontic analgesic intake. According to Choi (2022), the Yanglingquan acupuncture point (GB34) has benefits for curing numbness and pain in the lower extremities, knee pain (swelling and pain), beriberi, hypochondria, bitter taste in the mouth, nausea and vomiting, jaundice, and infantile spasms.

Healty Drink

Korea has healthy drinks made from natural ingredients. They usually use this drink as a tonic and to increase body immunity; buja tonic and pine wine.

Table 6. Healty Drink

Healthy Drink		
Name	Benefit	Supporting Scientific Article
buja tonic (mung beans)	for detox	Hou et al. (2019)
Pine wine	It is not wine that makes you drunk but is useful for improving health because it is made from fermented pine pollen	Kostic et al. (2020)

Source: Data Processing Result (2024)

Mung beans are a type of grain that is easy to process into various foods, especially those that taste sweet such as cakes, bread, and porridge. However, it can also be used as a health drink ingredient. The tonic benefits of it (*Vigna radiata* L.) were conveyed by Hou et al. (2019) that it has a long history of use as a traditional medicine in Asia due to rich in protein, fiber, minerals, vitamins, bioactive compounds (polyphenols, polysaccharides, and peptides). It improves hyperglycemia, hypertension, and hyperlipemia, prevent cancer and melanogenesis, and has hepatoprotective and immunomodulatory activities. Another plant that can be used as a health drink ingredient is pine pollen for making wine. Although named wine, this drink does not contain intoxicating alcohol. On the contrary, pine wine is a tonic for a healthy body. Kostić et al. (2020) explained that pine pollen fermentation products contain

microbial species for the fermentation process of lactobacillus paracasei Lc-3. Pine pollen fermentation products have better nutritional value.

Environmental Influence on Health

Environmental objects that have an effect on health are rainwater, dust, sand, and fallen pollen.

Table 7. Environmental Influence on Health

Environmental Influence on Health		
Name	Benefit	Supporting Scientific Article
Rain water	Boiled dirty rain water to wash dishes and cool it for washing vegetables. Boiling it will kill bacteria, viruses and parasites so it is safe to use.	Yang et al. (2023)
	Gather it for drinking water.	Khayan et al. (2019)
Dust or sand	These affect food spoil faster, diseases spread	FAO (2023)
Fallen Pollen	Pollen is good for food fermentation. Make bean paste by placing a jar under a tree. Pollen will fall on the jar. Pollen influences the fermentation process.	Utoi et al. (2018)

Source: Data Processing Result (2024)

Yang et al. (2023) argue, in conditions of clean water shortage, we can collect rainwater for washing, irrigating plants, and drinking. However, we need to be aware of pathogenic organisms (protozoa, bacteria, and viruses) in it. These hazardous substances need to be neutralized so that the water is safe to drink. Contaminated water will cause diarrhea and vomiting. The simplest way to purify it is to let the water sit in a container for a while until the particles settle, then boil it. A more modern action to kill germs is by sterilizing with ultraviolet light. Khayan et al. (2019) also argue that rainwater is the main source of drinking water in tropical areas. However, areas experiencing air pollution cause rainwater to become acidic, cloudy, and contain heavy metals. Hazardous substances in rainwater will have an impact on public health. We can use mollusk sand and activated carbon to neutralize it so that it is safe to consume.

Dust and sand not only have a direct effect on humans but also on the plants that we consume. Food that is exposed to sand and dust will rot quickly so it is not suitable for consumption, even though the vegetables still look quite fresh. The more people who eat (plants that have been exposed to dust and sand), the potential for disease outbreaks. The Food and Agriculture Organization of the United Nations (FAO, 2023) explains that sand and dust storms have a negative impact on plants. Sand and dust that sticks to cereals, dates, fruits, and vegetables will make these plants easy to rot. Another environment that is beneficial to us is a garden or forest with plants that have pollen. In the drama Jewell In The Palace, they put barrels of food to be fermented under a garden rich in pollen. According to Utoi et al. (2018), pollen is beneficial for the fermentation process of green tea Kombucha with SCOBY (symbiotic culture of bacteria and yeasts) consortium. Pollen was added to the 20th day of Kombucha fermentation. Ultrastructural analysis revealed that the content of bioactive compounds (polyphenols, soluble silicon species, and Short Chain Fatty Acids) in kombucha increased. Kombucha supplemented with pollen showed antitumor effects.

Benefits of Plants for Health

Chinese cabbage, caterpillar mushroom, pumpkin, and yams are examples of food that can be an option when we have health problems.

Table 8. Benefits of Plants for Health

Benefits of Plants for Health		
Name	Benefit	Supporting Scientific Article
Chinese cabbage	Relieve the constipation	Stefan & Ona (2020)
Caterpillar mushroom	for phlegm and reducing inflammation	Bhetwal et al. (2021)
Pumpkin	Reduce the indigestion	Pereira et al. (2020)
Yams	to build up energy	Wanita et al. (2021)

Source: Data Processing Result (2024)

Chinese cabbage (*brassica oleracea*) has long been used as a herbal food in Greece, Rome, and Egypt to relieve constipation, antidote to mushroom poison, treatment for hangovers, headaches, for cooling the effects of sunburn, relieving fever, reducing swollen feet, treating croup in children, and anti-inflammatory or irritation. This is due to the nutritional content of cabbage (glucosinolates, polyphenols, and various vitamins) act as anticarcinogenic and antioxidants (Stefan & Ona, 2020). Another plant for relieving inflammation is *cordyceps sinensis* (Peculiar caterpillar mushroom). Traditional Chinese Medicine (TCM) has long used this mushroom for respiratory diseases (cough and bronchitis), liver, kidney, cardiovascular, hyposexuality, hyperlipidemia, inflammation, pain, and aches (Bhetwal et al., 2021).

We can also use other ingredients to make healthy food. Pereira et al. (2020) explained that pumpkin can be made into flour as a basic ingredient for making food because it has high protein digestibility and is safe for the stomach. Pumpkin flour can be an additional ingredient for thickening soups, sauces, cakes, bread, and instant noodles. According to Wanita et al. (2021), yam (*Discore alata*) is a local tuber is a substitute for wheat flour and a non-rice carbohydrate source and as a source of carbohydrates to increase energy (muscles, brain, blood), just like wheat, wheat and rice.

Spices

Ginger, nutmeg, and garlic are examples of spices that are beneficial for the body.

Table 9. Spices

Spices		
Name	Benefit	Supporting Scientific Article
Ginger	neutrals poison in the stomach	Pratap et al. (2017)
Nutmeg	diarrhea and indigestion for chronic arthritis and help deep sleep	Abourashed & El-Alfy (2016) Ghorbanian et al. (2019)
Garlic	Good for the stomach and helps digestion suitable for beriberi	Rayimkulovich & Qizi (2020) Wilson (2020)

Source: Data Processing Result (2024)

We know ginger as a herbal plant, cooking ingredient, and beverage ingredient. Pratap et al. (2017) explained that ginger could neutralize toxins from seafood (fish and crab) in the body and stomach by removing them through sweat, relieving bloating, eliminating colds, warming the stomach, and stopping vomiting. Other benefits of ginger are thinning phlegm and relieving coughs. Spices that can also be used as herb are nutmeg. Abourashed & El-Alfy (2016) acknowledged that it has long been used as a gastrointestinal medicine (flatulence, indigestion, colic), antidiarrheal, antimicrobial, antioxidant, rheumatic pain, wound healing, skin infections, and a calming agent. The benefits of nutmeg are also conveyed by Ghorbanian et al. (2019), for treating rheumatoid arthritis, canker sores, diarrhea, and insomnia.

Rayimkulovich & Qizi (2020) explain that garlic is effective against bacteria and viruses, prevents food poisoning, and kills bacteria (rods and salmonella) in the stomach. The vitamin B6 in garlic is for the immune system, the growth of new cells, and improves mood. The allucin in garlic has antiviral, antifungal, antibacterial, and antioxidant. Phytonutrients (selenium, alliin, and adjoen) in garlic have good effects on the blood (smoothing circulation, stabilizing blood pressure, and cleansing the blood) and strengthening digestive function. Another benefit of garlic is curing beriberi. Wilson (2020) explains that beriberi is caused by nutritional complications due to a lack of vitamin B1 (thiamine). Natural sources of vitamin B1 are garlic, onions, leeks, and chives. We can use these three spices as ingredients to make various healthy foods and reduce the effects of beriberi.

Fruits

Ripe persimmon, plum, and wild strawberries are examples of fruits that have specific benefits for the body.

Table 10. Fruits

Fruits		
Name	Benefit	Supporting Scientific Article
Ripe persimmon	For preventing hangovers	Zhou et al. (2019)
Plum	for stomach and liver	Al-Syahlanee et al. (2019)
Wild strawberries	are good for face	Gasparrini et al. (2015)

Source: Data Processing Result (2024)

Fermented persimmon juice has higher anti-hangover and anti-hypertension benefits than unfermented fruit juice (Zhou et al., 2019). Plums have many nutrients such as polyphenols, organic acids (malic, citric, caffeic, chlorogenic, neochlorogenic), rutin, heteropolysaccharides, gallic acid, homo- and anthocyanins. The fruit with the name *Prunus domestica* L., fam. Rosaceae is also widely used for gastrointestinal diseases, constipation, bile stagnation, intestinal atony, and liver (Al-Sahlanee et al., 2019).

Strawberries are a source of vitamins, polyphenols, anthocyanins, and antioxidants so they provide a strong protective effect against skin damage due to oxidative, UVA rays, and free radicals. Strawberries are not only healthy for the body but are also for beautifying the skin (Gasparrini et al., 2015).

Benefits of Animals for Human Health

Some animals can be eaten to make our bodies healthy like abalone. There are also animals that we cannot consume but still provide health benefits, for example: shells coal, horsefly, and leech.

Table 11. Benefits of Animals for Human Health

Benefits of Animals for Human Health		
Name	Benefit	Supporting Scientific Article
Abalone inside	for porridge will give nutrition because it only eat fresh sea plants. The taste of the sea and nutrients remain in them.	Yusup et al. (2020)
Shells coal	for purifying the rain water	Ashri et al. (2020)
Horsefly	sucks human blood to prevent blood clots.	Miller et al. (2022)
Leech	sucks human blood to prevent blood clots.	Montinari & Minelli (2022)

Source: Data Processing Result (2024)

Abalone eats various marine plants such as *Enteromorpha* sp. (green algae), *ulva lactuca* (sea lettuce), *halymenia* sp (red seaweed), *sargassum* sp (brown algae), *gracillaria* sp (red algae), *eucheuma spinosum* (sea moss), and *hypnea* sp (carrageenophyte). These foods are superfoods rich in nutrients (Yusup et al., 2020). Thus, abalone is an excellent source of nutrition for us.

Ashri et al. (2020) said, rainwater is a source of water for the community. However, not all rainwater is residue-free. Therefore, it is necessary to filter and purify rainwater so that it is suitable for consumption. We can use five layers of natural filters by gravel, sand, charcoal, shells, and peat to filter dirt and heavy metals, remove odors and tastes, and break down compounds in water.

Miller et al. (2022) explained that horsefly salivary glands have anticoagulants to be secreted into wounds to prevent blood clotting. Another animal whose saliva is useful for us is the leech. Montinari & Minelli (2022) leeches have long been used in health care. The leech saliva product called *hirudin* is a natural anticoagulant to prevent blood clotting.

Healthy Tips

Here are some tips for utilizing what is around us for health. We can use charcoal, warm water plus salt, salt water, bamboo, walking and having fresh air, apples, dried ginseng, and green tea to improve health.

Table 12. Healthy Tips

Healthy Tips		
Name	Explanation	Supporting Scientific Article
Charcoal	Charcoal absorbs the bad smell and the sharp taste of vinegar, soy sauce, and rice	Chaemsanit et al. (2018) Pandey (2022)

Warm water plus salt	Sore throat	Kim & Park (2020)
Salt water	To relieve toothache	Karimi (2016)
Salty water	doesn't suitable for medicine	Paul & Jaded (2017)
Bamboo	Cooking rice in the bamboo is good for health	Rekha et al. (2020)
Walking and having fresh air	Trouble sleeping at nights, don't force to sleep but take a walk to have fresh air for a moment.	Ulmer et al. (2018)
Apple	Put a basket of apples near the bed. Inhaling the aroma of apples can calm the mind and make it easier to fall asleep soundly.	Spence (2020)
Dried Ginseng	Fresh ginseng will dry up – decrease the efficacy so the solution is steam it then dry it again to keep its efficacy and remove the poison.	Lee et al. (2015)
Green tea	Steam garlic with green tea leaves to remove the smell of garlic.	Munch (2013)
	Don't drink green tea at night	Pastoriza et al. (2017)

Source: Data Processing Result (2024)

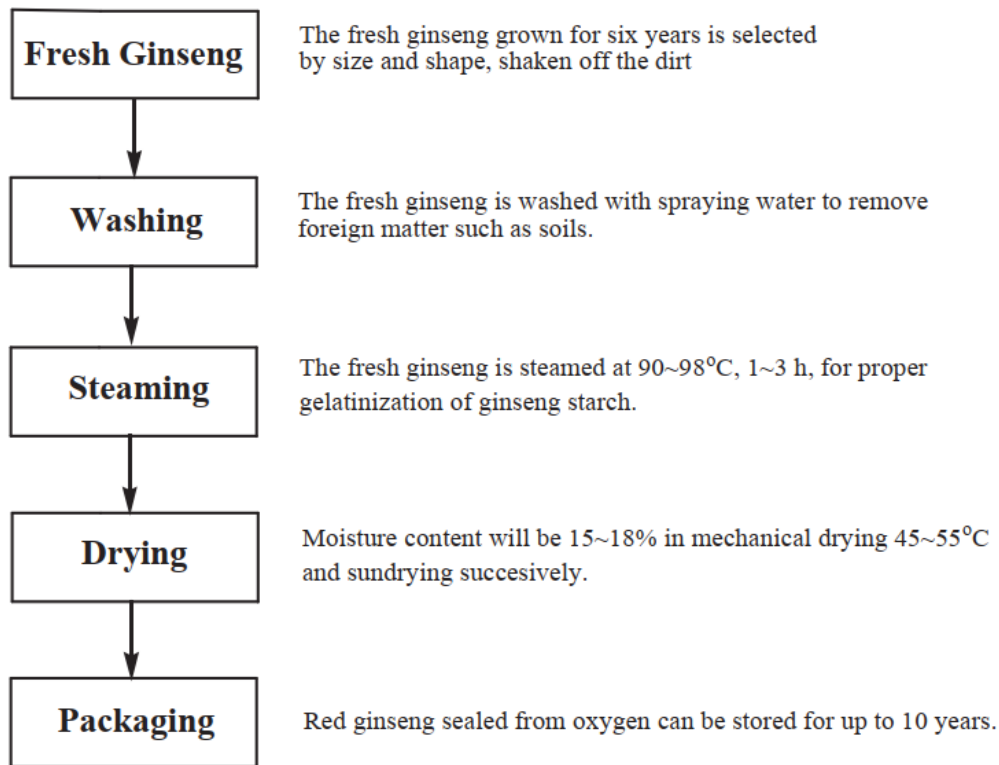
According to Chaemsanit et al. (2018), activated carbon like charcoal has the benefit of absorbing extreme odors and tastes in water, air, and food. Pandey (2022) explains another function of it, namely to clean teeth. Finely ground charcoal is a substitute for soap to clean cutlery and wash hands. The use of it is increasingly developing into an organic food ingredient. Around us, there are already many "black foods" that contain charcoal as their raw material. Kim & Park (2020) provide first-aid tips for sore throats. Gargling with salt water will relieve dry mouth and sore throats. Karimi (2016) provides another explanation of the benefits of salt; as an antiseptic to relieve mild toothache. We can make a warm saltwater solution and then use it to gargle. Behind its benefits as an anti-bacterial, there is a negative side to salt. According to Paul & Jaded (2017), bathing with salt water continuously, especially if it is too salty, will cause itching, hair loss, rashes, scabies, infections, and skin allergies. Excessive consumption of salt water will affect gastroenteritis and diarrhea.

How to process rice to be healthier is also given by Dae Jang Geum by cooking rice in bamboo. Rekha et al. (2020) explained that bamboo rice is aromatic bamboo rice, pale green with a sticky texture, and bamboo leaf flavor. It is rich in photochemicals, vitamins, antioxidants, phosphorus, protein, and fiber for improving health (controlling blood sugar, lowering cholesterol, preventing constipation, and reducing joint pain and swelling). Quality sleep tips are also in the drama *Jewell In The Palace* by taking a leisurely walk around the house (to breathe fresh air and relax muscles) and give our room a fresh scent. Ulmer et al. (2018) argue that we can do light physical activities such as stretching and taking a short walk to breathe fresh air and calm the body and mind so that it is easy to sleep. Another tip is not to drink coffee, tea, energy drinks, and soda before bed. These drinks will increase awareness and brain function to think so that we have difficulty sleeping. The results of Spence's study (2020) show that simply changing the scent of the room (cloves, oranges, and apples) can reduce stress in dental patients.

Ginseng is closely associated with Korea. The world also recognizes the quality of Korean ginseng as an herb with many benefits. However, this root is wet and easily rots. According to Lee et al. (2015), Korean ginseng (*Panax ginseng* Meyer, Araliaceae) has long

been used as an herb. However, fresh ginseng is easily damaged at room temperature. Therefore, processing is needed to make it last longer. The method is to make ginseng white by a simple drying process without steaming. Another way is to turn it into red ginseng by steaming and drying fresh ginseng. It changes color to red. Lee et al. (2015) said, red ginseng has higher biological effects and fewer side effects than fresh and white ginseng. The process of steaming ginseng has been carried out since ancient times. The GoRyeoDoGyeong record (written in 1123) by Seo-Gung in the Song Dynasty mentioned red ginseng as steamed ginseng that has been dried. The process of making red ginseng can be learned from Figure 2.

Figure 2. Manufacturing Process of Red Ginseng from Fresh Ginseng



Source : Lee et al. (2015)

Garlic has also been widely recognized for its health benefits. However, garlic is also often avoided because of its pungent aroma. Jang Geum gets around this by steaming garlic with green tea. The sulfur smell of garlic disappears. Munch (2013) admitted that tea is rich in polyphenols that can react with volatile substances in garlic. More specifically, green tea has been proven to be the most effective inhibitor of volatile sulfur compounds (in garlic). Thus, tea, especially green tea, can neutralize the smell of garlic, and eliminate body odor and bad breath due to garlic consumption. Another substance in leaves, chlorophyll (green leaf substance) also has the potential to reduce odors caused by food. Chlorophyll will absorb the odors of food, drinks, and tobacco. Chlorophyll can also reduce body odor and bad breath (including those caused by garlic).

Although it has many benefits, we must limit our consumption of green tea, especially at bedtime. According to Pastoriza et al. (2017), green tea contains caffeine although in small amounts. Caffeine stimulates the central nervous system (increased secretion and function of neurotransmitters and alertness). Therefore, it makes it difficult for us to sleep.

Natural Ingredients for Skincare

The efficacy of Korean skincare has been widely recognized worldwide because of its natural ingredients. Mulberry trees, rice water, and mugwort are examples of plants used by the Korean beauty industry to care for the skin.

Table 13. Natural Ingredients for Skincare

Natural Ingredients for Skincare		
Ingredients	Explanation	Supporting Scientific Article
Mulberry tree	Removes freckles and moles	Nomakhosi & Heidi (2018)
Rice water	For moisturize	Marto et al. (2018)
Mugwort	For moisturize	Yu et al. (2020)

Source: Data Processing Result (2024)

Mulberry (*Morus alba* L.) is a safe natural lightening agent because it is rich in antioxidants. The root extract has a skin depigmentation effect by inhibiting the activity of dopa oxidase tyrosinase. Dried mulberry leaves have an inhibitory effect on the action of tyrosinase and the formation of melanin in melan-a cells (Nomakhosi & Heidi., 2018). Rice (*Oryza sativa*) is beneficial for the skin. Rice water can be used as a skincare ingredient because it has been shown to show in vitro biological antioxidant activity and an elastase inhibitory effect that provides anti-aging and skin-brightening effects (Marto et al., 2018). In the study of Yu et al. (2020), mugwort (*artemisia annua*) has passed the test as one of the skincare ingredients to improve sensitive skin by increasing the degree of cuticle hydration, inhibiting inflammation, reducing redness, repairing the skin barrier, repairing damaged skin, and other symptoms of sensitive skin.

Conclusion

Korean Drama – Jewell In The Palace has main themes about health. The main themes are complemented by sub-themes to make it easier for us to understand the symptoms, types of medicines (herbal, flowers, animals), healing methods (with needles and animals), environmental benefits, healthy living, and natural skincare ingredients. The main theme the relationship between body changes and health has a sub-theme of symptoms of disease. Main themes like herbs, flowers, healthy drinks, environmental influence on health, benefits of plants for health, spices, fruits, and benefits of animals for human health have sub-themes names and benefits. Acupuncture has sub-themes its benefits. Healthy Tips have a kind of tips. Natural ingredients for skincare have sub-themes the ingredients.

The results of this study can be a source of reference for further research in various fields. Cultural sciences can conduct similar research on cultural documentation and media studies. Traditional health experts can research herbs, animals, flowers, and other plants mentioned in this drama as sources of natural medicine. Education experts can also research the effectiveness of drama as a learning medium, especially about local knowledge. Experts in research sciences can continue to study the potential of films, movies, comedy series, and dramas as sources of research data; both qualitative and quantitative.

Referensi

- Abourashed, E. A., & El-Alfy, A. T. (2016). Chemical diversity and pharmacological significance of the secondary metabolites of nutmeg (*Myristica fragrans* Houtt.). *Phytochemistry Reviews*, 15(6), 1035–1046. <https://doi.org/10.1007/s11101-016-9469-x>
- Al-Sahlane, B. J. A., Senyuk, I. V., Lenchyk, L. V., & Upyr, T. V. (2019). The study of influence of the extracts obtained from *Prunus Domestica* fruits on lipid peroxydation and antioxidant system indicators in liver. *Фармацевтичний Журнал*, 74(6), 85–93. <https://doi.org/10.32352/0367-3057.6.19.10>
- Ashri, S., Zainun, N. Y., Mohammad, H., Mohammad, H., Mohammed Ghazali, F. E., & Khahro, S. H. (2020). Water filtration design for rainwater harvesting system in Faculty of Civil Engineering and Built Environment, UTHM. *Recent Trends in Civil Engineering and Built Environment*, 1(1), 149–156. <https://doi.org/10.30880/rtcebe.2020.01.01.014>
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, 2, 8–14. <https://doi.org/10.1016/j.npls.2016.01.001>
- Bhetwal, S., Chatterjee, S., Samrat, R. R., Rana, M., & Srivastava, S. (2021). *Cordyceps sinensis*: Peculiar caterpillar mushroom, salutary in its medicinal and restorative capabilities. *The Pharma Innovation Journal*, 10(4), 1045–1054. <https://www.thepharmajournal.com/archives/?year=2021&vol=10&issue=4&ArticleId=6130>
- Bradley, J. M., Organ, C. L., & Lefer, D. J. (2016). Garlic-derived organic polysulfides and myocardial protection. *Journal of Nutrition*, 146(2), 403S–409S. <https://doi.org/10.3945/jn.114.208066>
- Brennen, B. S. (2017). *Methods for media studies (Second)*. Routledge.
- Chaemsanit, S., Matan, N., & Matan, N. (2018). Activated carbon for food packaging application: Review. *Walailak Journal of Science and Technology*, 15(4), 255–271. <https://doi.org/10.48048/wjst.2018.4185>
- Choi, J. I. (2022). Effects of acupuncture with Shao Yao Gan Cao Tang on *Quadratus Lumborum* pain: A randomized controlled clinical trial [South Baylo University]. In Dissertation. https://app.southbaylo.net/c1/library/uploads/daom/DAOM_Dissertation_for_Printing_Jung_In_Choi_22.pdf
- Darmadji, B. N. I. (2022). Menegosiasikan kekerabatan dengan rasa peduli: Analisis wacana kerabat dalam film *Shoplifters*. *Humanika*, 29(2), 201–215. <https://doi.org/10.14710/humanika.v29i2.48316>
- Ekiert, H., Świątkowska, J., Klin, P., Rzepiela, A., & Szopa, A. (2021). *Artemisia annua*-importance in traditional medicine and current state of knowledge on the chemistry, biological activity and possible applications. *Planta Medica*, 87, 584–599. <https://doi.org/10.1055/a-1345-9528>
- Fedorov, A., & Friesem, E. (2022). Soviet cineclubs: Baranov's film/media education model. *Journal of Media Literacy Education*, 7(2), 12–22. <https://doi.org/10.23860/jmle-7-2-3>
- Food and Agriculture Organization of the United Nations. (2023). Sand and dust storms - A guide to mitigation, adaptation, policy and risk management measures in agriculture. In *Sand and dust storms*. Food and Agriculture Organization of the United Nations. <https://doi.org/10.4060/cc8071en>
- Gao, J., Wang, Z., & Ye, Z. (2023). Madder (*Rubia cordifolia* L.) alleviates myocardial ischemia-reperfusion injury by protecting endothelial cells from apoptosis and inflammation. *Mediators of Inflammation*, 1–8. <https://doi.org/10.1155/2023/5015039>

- Gasparrini, M., Forbes-Hernandez, T. Y., Afrin, S., Alvarez-Suarez, J. M., González-Paramàs, A. M., Santos-Buelga, C., Bompadre, S., Quiles, J. L., Mezzetti, B., & Giampieri, F. (2015). A pilot study of the photoprotective effects of strawberry-based cosmetic formulations on human dermal fibroblasts. *International Journal of Molecular Sciences*, 16, 17870–17884. <https://doi.org/10.3390/ijms160817870>
- Ghorbanian, D., Ghasemi-Kasman, M., Hashemian, M., Gorji, E., Gol, M., Feizi, F., Kazemi, S., Ashrafpour, M., & Moghadamnia, A. A. (2019). *Myristica fragrans* houtt extract attenuates neuronal loss and glial activation in pentylenetetrazol-induced kindling model. *Iranian Journal of Pharmaceutical Research*, 18(2), 812–825. <https://doi.org/10.22037/ijpr.2019.1100670>
- Hou, D., Yousaf, L., Xue, Y., Hu, J., Wu, J., Hu, X., Feng, N., & Shen, Q. (2019). Mung bean (*Vigna radiata* L.): Bioactive polyphenols, polysaccharides, peptides, and health benefits. *Nutrients*, 11(6), 1–28. <https://doi.org/10.3390/nu11061238>
- Hu, J. S. (2009). Acupuncture treatment of heel pain. *Journal of Traditional Chinese Medicine*, 29(2), 150–152. [https://doi.org/10.1016/s0254-6272\(09\)60053-4](https://doi.org/10.1016/s0254-6272(09)60053-4)
- Jeong, J., Lee, S., & Lee, S. (2017). When Indonesians routinely consume Korean Pop Culture : Revisiting Jakartan fans of the Korean Drama Dae Jang Geum. *International Journal of Communication*, 11, 2288–2307. <https://ijoc.org/index.php/ijoc/article/view/6302>
- Jiaqi, Z., Hong, L., Rui, Q., Choi, H.-Y., & Xinzhou, Y. (2021). Ethnomedicinal uses, phytochemistry and bioactivities of *Sophora flavescens* Ait.: A review. *Journal of Holistic Integrative Pharmacy*, 2(3), 163–195. [https://doi.org/10.1016/s2707-3688\(23\)00077-8](https://doi.org/10.1016/s2707-3688(23)00077-8)
- Jones, A. L., Porcheron, A., Sweda, J. R., Morizot, F., & Russell, R. (2016). Coloration in different areas of facial skin is a cue to health: The role of cheek redness and periorbital luminance in health perception. *Body Image*, 17, 57–66. <https://doi.org/10.1016/j.bodyim.2016.02.001>
- Karimi, M. (2016). Grandma remedies and herbal medicines for relieving toothache. *Open Access Journal of Dental Sciences*, 1(2), 1–5. <https://doi.org/10.23880/oajds-16000106>
- Khayan, K., Husodo, H. A., Astuti, I., Sudarmadji, S., & Djohan, T. S. (2019). Rainwater as a source of drinking water: Health impacts and rainwater treatment. *Journal of Environmental and Public Health*, 1–10. <https://doi.org/10.1155/2019/1760950>
- Kim, D. H., & Park, J. S. (2020). The effect of saline gargling on dry mouth and sore throat in patients with thyroidectomy. *Asian Oncology Nursing*, 20(4), 160–170. <https://doi.org/10.5388/aon.2020.20.4.160>
- Kim, J. H., Park, B. I., & You, Y. O. (2022). Treatment with *Commelina communis* extract exerts anti-inflammatory effects in murine macrophages via modulation of the nuclear factor- κ B pathway. *Mediators of Inflammation*, 1–11. <https://doi.org/10.1155/2022/2028514>
- Kim, S.-K., Oh, Y., & Nam, S. (2019). Research trends in Korean medicine based on temporal and network analysis. *BMC Complementary and Alternative Medicine*, 19(1), 1–10. <https://doi.org/10.1186/s12906-019-2562-0>
- Kostić, A., Milinčić, D. D., Barać, M. B., Shariati, M. A., Tešić, Ž. L., & Pešić, M. B. (2020). The application of pollen as a functional food and feed ingredient—the present and perspectives. *Biomolecules*, 10, 1–36. <https://doi.org/10.3390/biom10010084>
- Kumar, G., & Tewari, S. (2023). Acupuncture for management of endodontic emergencies: A review. *JAMS Journal of Acupuncture and Meridian Studies*, 16(1), 1–10. <https://doi.org/10.51507/j.jams.2023.16.1.1>
- Lee, S. G., & Kang, H. (2014). Inhibition of lipopolysaccharide-stimulated neuro-inflammatory kuntze in BV-2 microglial cell mediators by *Tetragonia tetragonoides* (Pall). *Tropical*

- Journal of Pharmaceutical Research, 13(12), 2005–2010.
<https://doi.org/10.4314/tjpr.v13i12.8>
- Lee, S. M., Bae, B. S., Park, H. W., Ahn, N. G., Cho, B. G., Cho, Y. L., & Kwak, Y. S. (2015). Characterization of Korean red ginseng (*Panax ginseng* Meyer): History, preparation method, and chemical composition. *Journal of Ginseng Research*, 39, 384–391. <https://doi.org/10.1016/j.jgr.2015.04.009>
- Lee, Y. S., Ryu, Y., Jung, W. M., Kim, J., Lee, T., & Chae, Y. (2017). Understanding mind-body interaction from the perspective of East Asian medicine. *Evidence-Based Complementary and Alternative Medicine*, 1–7. <https://doi.org/10.1155/2017/7618419>
- Lin, T. C., Sung, J. M., & Yeh, M. S. (2014). Karyological, morphological and phytochemical characteristics of medicinal plants *Sophora flavescens* Aiton grown from seeds collected at different localities. *Botanical Studies*, 55(1), 1–7. <https://doi.org/10.1186/1999-3110-55-5>
- Marto, J., Neves, Â., Gonçalves, L. M., Pinto, P., Almeida, C., & Simões, S. (2018). Rice water: A traditional ingredient with anti-aging efficacy. *Cosmetics*, 5(2), 1–12. <https://doi.org/10.3390/cosmetics5020026>
- Miller, B., Villet, M., & Midgley, J. M. (2022). A confirmed feeding attempt by the haematophagous horse fly *Philoliche* (*Philoliche*) *rondani* (Bertoloni, 1861) (Diptera: Tabanidae) on fresh carrion. *Biodiversity Data Journal*, 10. <https://doi.org/10.3897/BDJ.10.E77507>
- Montinari, M. R., & Minelli, S. (2022). From ancient leech to direct thrombin inhibitors and beyond: New from old. *Biomedicine and Pharmacotherapy*, 149. <https://doi.org/10.1016/j.biopha.2022.112878>
- Mulyadi, B., & Prasetyaningtyas, A. (2022). Pengenalan budaya Jepang dalam kanal Youtube Nihongo Mantappu Jerome Polin. *Humanika*, 29(1), 46–59. <https://doi.org/10.14710/humanika.v29i1.44012>
- Munch, R. B. . (2013). Deodorization of garlic breath volatiles by food and food components. In The Ohio State University. <https://pubmed.ncbi.nlm.nih.gov/24592995/>
- Nomakhosi, M., & Heidi, A. (2018). Natural options for management of melasma, a review. *Journal of Cosmetic and Laser Therapy*, 20(7–8), 470–481. <https://doi.org/10.1080/14764172.2018.1427874>
- Onur, A., & Montague, E. (2014). Using video-based observation research methods in primary care health encounters to evaluate complex interactions. *Journal of Innovation in Health Informatics*, 21(4), 161–170. <https://doi.org/doi:10.14236/jhi.v21i4.72>
- Pandey, D. (2022). Scope of using activated charcoal in culinary and its therapeutic usage. *International Journal of Research and Analytical Reviews (IJRAR)*, 9(1), 220–224. www.ijrar.org
- Pastoriza, S., Mesías, M., Cabrera, C., & Rufián-Henares, J. A. (2017). Healthy properties of green and white teas: An update. *Food and Function*, 8, 2650–2662. <https://doi.org/10.1039/c7fo00611j>
- Paul, A., & Javed, M. A. (2017). Salinity has made our life terrible: A qualitative investigation of human sufferings in the Chittagong coast. *Oriental Geographer*, 59(1), 1–18. https://www.researchgate.net/publication/333149544_Salinity_has_made_our_life_terrible_A_qualitative_investigation_of_human_sufferings_in_the_Chittagong_coast
- Pereira, A. M., Krumreich, F. D., Ramos, A. H., Krolow, A. C. R., Santos, R. B., & Gularte, M. A. (2020). Physicochemical characterization, carotenoid content and protein digestibility of

- pumpkin access flours for food application. *Food Science and Technology*, 40(2), 691–698. <https://doi.org/10.1590/fst.38819>
- Pratap, S. R., Gangadharappa, H. ., & Mruthunjaya, K. (2017). Ginger: A potential nutraceutical, an updated review. *International Journal of Pharmacognosy and Phytochemical Research*, 9(9), 1227–1238. <https://doi.org/10.25258/phyto.v9i09.10311>
- Rabasová, P. (2017). Content validation of nursing diagnosis of deficient fluid volume [Dehydration] in the context of neonatological nursing. *Central European Journal of Nursing and Midwifery*, 8(2), 622–631. <https://doi.org/10.15452/CEJNM.2017.08.0011>
- Rayimkulovich, A. A., & Qizi, M. R. Z. (2020). The main pests of garlic. *JournalNX- A Multidisciplinary Peer Reviewed Journal*, 6(9), 271–273. <https://repo.journalnx.com/index.php/nx/article/view/369>
- Rekha, K., Singh, R. S., Shekhawat, K., & Singh, K. S. (2020). Centurion bowl of rice : Bamboo rice. *Agriculture & Food: E- Newsletter*, 2, 188–190. https://www.researchgate.net/publication/342887694_Centurion_Bowl_of_Rice_Bamboo_Rice
- Risso, D., Drayna, D., & Morini, G. (2020). Alteration, reduction and taste loss: Main causes and potential implications on dietary habits. *Nutrients*, 12(11), 1–16. <https://doi.org/10.3390/nu12113284>
- Singh, H., Kaur, P., & Dutt, B. (2022). Indian elecampane: Potential medicinal and aromatic crop for sustainable development. *The Pharma Innovation Journal*, 11(9), 152–156. www.thepharmajournal.com
- Song, G., Fiocchi, C., & Achkar, J. P. (2019). Acupuncture in inflammatory bowel disease. *Inflammatory Bowel Diseases*, 25(7), 1129–1139. <https://doi.org/10.1093/ibd/izy371>
- Spence, C. (2020). Using ambient scent to enhance well-being in the multisensory built environment. *Frontiers in Psychology*, 11(November), 1–19. <https://doi.org/10.3389/fpsyg.2020.598859>
- Ştefan, I. M. A., & Ona, A. D. (2020). Cabbage (*Brassica Oleracea L.*). overview of the health benefits and therapeutical uses. *Hop and Medicinal Plants*, 1, 150–169. https://www.researchgate.net/publication/353411136_Cabbage_Brassica_oleracea_L_Overview_of_the_Health_Benefits_and_Therapeutical_Uses
- Ulmer, C., Farrell-Carnahan, L., Hughes, J., Manber, R., Leggett, M., Tatum, J., Swinkels, C., & Beckham, J. (2018). Improve your sleep: A self-guided approach for veterans with insomnia (Self-Help Workbook). VA Health Care. <https://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=126304817&site=ehost-live>
- Uţoiu, E., Matei, F., Toma, A., Diguţă, C. F., Ştefan, L. M., Mănoiu, S., Vrajmaşu, V. V., Moraru, I., Oancea, A., Israel-Roming, F., Cornea, C. P., Constantinescu-Aruxandei, D., Moraru, A., & Oancea, F. (2018). Bee collected pollen with enhanced health benefits, produced by fermentation with a kombucha consortium. *Nutrients*, 10, 1–24. <https://doi.org/10.3390/nu10101365>
- Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, 6(5), 100–110. <https://doi.org/10.5430/jnep.v6n5p100>
- Vique-Sánchez, J. L., & Galíndez-Fuentes, A. I. (2021). Acupuncture as a complementary medicine for depression caused by the confinement by COVID-19. *Revista Internacional de Acupuntura*, 15, 1–5. <https://doi.org/10.1016/j.acu.2021.04.002>

- Wang, J., Feng, W., Zhang, S., Chen, L., Sheng, Y., Tang, F., He, J., Xu, X., Ao, H., & Peng, C. (2019). Ameliorative effect of *Atractylodes macrocephala* essential oil combined with *Panax ginseng* total saponins on 5-fluorouracil induced diarrhea is associated with gut microbial modulation. *Journal of Ethnopharmacology*, 238. <https://doi.org/10.1016/j.jep.2019.111887>
- Wanita, Y. P., Indrasari, S. D., Wiranti, E. W., & Kristamtini. (2021). The quality improvement of yam flour (*Dioscorea alata*) through the fermentation process. *IOP Conference Series: Earth and Environmental Science*, 759(1), 1–10. <https://doi.org/10.1088/1755-1315/759/1/012031>
- Wen, S., Zhang, X., Wu, Y., Yu, S., Zhang, W., Liu, D., Yang, K., & Sun, J. (2022). *Agrimonia pilosa* Ledeb.: A review of its traditional uses, botany, phytochemistry, pharmacology, and toxicology. *Heliyon*, 8, 1–22. <https://doi.org/10.1016/j.heliyon.2022.e09972>
- Yang, H. C., Jusoh, M., Zakaria, Z. Y., & Rosli, A. (2023). Rainwater to potable water: Mini review. *Chemical Engineering Transactions*, 775–780. <https://doi.org/10.3303/CET23106130>
- Yin, C. S., & Ko, S. G. (2014). Introduction to the history and current status of evidence-based Korean medicine: A unique integrated system of allopathic and holistic medicine. *Evidence-Based Complementary and Alternative Medicine*, 1–7. <https://doi.org/10.1155/2014/740515>
- Yu, J., Wang, G., & Jiang, N. (2020). Study on the repairing effect of cosmetics containing *Artemisia annua* on sensitive skin. *Journal of Cosmetics, Dermatological Sciences and Applications*, 10, 8–19. <https://doi.org/10.4236/jcdsa.2020.101002>
- Yusup, D. S., Mahardika, I. G., Suarna, I. W., & Giri, I. N. A. (2020). Feeding preference and growth response of early adults abalone, *Haliotis squamata* on some macroalgae. *Biodiversitas*, 21(9), 4369–4375. <https://doi.org/10.13057/biodiv/d210956>
- Zhang, G., Lu, B. F., Wang, E., Wang, W., Li, Z., Jiao, L., Li, H., & Wu, W. (2023). *Panax ginseng* improves physical recovery and energy utilization on chronic fatigue in rats through the PI3K/AKT/mTOR signalling pathway. *Pharmaceutical Biology*, 61(1), 316–323. <https://doi.org/10.1080/13880209.2023.2169719>
- Zhou, C., Li, J., Mao, K., Gao, J., Li, X., Zhi, T., & Sang, Y. (2019). Anti-hangover and anti-hypertensive effects in vitro of fermented persimmon juice. *CYTA - Journal of Food*, 17(1), 960–966. <https://doi.org/10.1080/19476337.2019.1680578>