原著論文

The *Eat Your Medicine* Puzzle: Where Collocations and Neologisms Meet

FU Kenryo

コロケーションと新語の交差点にあるEat Your Medicineパズルについて

傅建良

Abstract

This paper aims to manifest the advent of a new type of collocation, *eat your medicine*, and its increasing use over the past years from perspectives of syntax-semantics and social functions. Discussion on the *eat your medicine* collocation in this paper starts with different verbs or verb phrases in different languages employed to verbalize an act or event of consuming oral medication to treat illnesses. Then, we shift our attention to the English verb *eat*, whose usages fall into three types, Type A and Type B based on a syntactic-semantic viewpoint and Type C based on a viewpoint of social functions. Next, the Object, Instrument, and Subevent parameters are proposed to investigate the *eat your medicine* phenomenon. Finally, the paper verifies that (a) an Object plays a distinctively different role in each of the three types of *eat* collocation; (b) in terms of an Instrument in an *eat* collocation, Type A implies the use of an Instrument, Type B requires the use of an Instrument; and (c) as to the Subevent parameter in an *eat* collocation, Subevent 1 (to take into the mouth) and Subevent 3 (to swallow) are mandatory in all types while Subevent 2 (to masticate) is arbitrary in Types A and C and generally does not exist in Type B.

Key words: collocation, neologism, syntax-semantics, social functions, the Object-Instrument-Subevent parameters, Complicated Object

(Received: March 22, 2023 Accepted: July 5, 2023 Issued: September 30, 2023)

1. INTRODUCTION

When we verbalize an event or action in which patients consume or swallow oral or internal medication to treat and cure their illness, such verb phrases as *take his medicine* in (1), and *take your medicine*¹ in (2) below are generally preferred in the English language. On the other hand, that

is not the case with other languages, such as Japanese and Chinese. For instance, instead of the typical Chinese and Japanese equivalents to the English verb *take* above, *chi yao*, literally *eat (your) medicine*, is usually employed in Chinese, and *kusuri wo nomu*, literally *drink (your) medicine*, is usually preferred in Japanese². In general, Englishspeaking people tend to *take their medicine*, whilst Chinese-speaking people and Japanese-speaking people prefer to *eat their medicine* and *drink their medicine*. Intriguingly, the English verbs *eat* and *drink* sometimes also co-occur with *medicine* in the "*eat / drink* + NP" collocation in English, as in (3), (4) below, and (15) in Part Two. Although viewed as a marked usage, *eat your medicine* particularly has been displaying a steady increase in its usage frequency over the past years, according to Google Books Ngram Viewer³(referred to as GBNV hereafter).

- (1) He forgot to <u>take his medicine</u>. (MWD⁴ Online; underlines mine, the same hereafter)
- (2) Did you take your medicine? (OALD⁵ Online)
- (3) Pegan Diet Cookbook: Learn the <u>Eat Your</u> <u>Medicine</u> Approach with 150 Recipes Combining the Best of Paleo and Vegan Diet for Absolute Lifelong Health. Includes Fully Vegan Recipes Options (Google Books: *Pegan Diet Cookbook*)
- (4) Food is the most powerful medicine available to heal chronic disease, which will account for over 50 million deaths and cost the global economy \$47 trillion by 2030. All you need to do is <u>eat your medicine</u> and think of your grocery store as your pharmacy.

(https://drhyman.com/blog/2011/10/14/ eat-your-medicine-food-as-pharmacology/)

This paper is a usage-based study on the marked uses of *eat your medicine* in the English language from the perspectives of syntax-semantics and social functions. Following Part One, which is a brief introduction to the study, Part Two explores representative literature or studies in the theoretical frame, especially on collocations, multiword expression (referred to as MWE hereafter) in Baldwin & Kim (2010), constructions in Goldberg (1995, 2006, 2019), neologisms in Kerremans (2012), and so on. The ensuing parts deal with three usages of the verb *eat*, i.e., Type A,

the primary usage of *eat* (Part Three); Type B, the secondary usage of *eat* (Part Four); and Type C, a newly proposed third usage of *eat* in this paper (Part Five). Finally, in Part Six, the paper draws a conclusion from the discussions in the previous parts.

2. LITERATURE REVIEW

2.1 Collocations

After exploring and reviewing various related studies in the discipline, the present study employs a relatively more neutral terminology collocation to indicate a linguistic unit of multiple words with syntactical and semantic properties and social functions. Collocations in this study include those units whose meanings are predictable from their components and those whose meanings are unpredictable from their components. Over the past decades, the above-mentioned linguistic unit with multiple words has attracted much attention from many linguists and scholars, among whom Goldberg (1995, 2006, 2019) and Baldwin & Kim (2010) are the representative ones. Goldberg terms linguistic units with multiple words as constructions, i.e., "pairings of forms and functions" (Goldberg, 2019, p. 2). Goldberg (1995) first defines a construction as in (5) below in a narrow sense, overemphasizing unpredictability in the meaning of a construction. Later Goldberg (2006) broadens her definition of constructions as in (6) below and further introduces "sufficient frequency" of constructions in her redefinition. On the other hand, Baldwin & Kim (2010) employ a different terminology, multiword expressions (MWEs), and adopt the formal definition of MWEs as in (7) below. The meaning of some collocations, as in (9) below, is predictable, whereas the meaning of other units, as in (8), is unpredictable because "their meaning often does not result from the direct combination of the meanings of their parts" (asialex Newsletter, Jan 18th, 2023).

- (5) C is a CONSTRUCTION if and only if C is a form-meaning pair <*Fi*, *Si*> such that some aspect of *Fi* or some aspect of *Si* is not strictly predictable from C's component parts or from other previously established constructions. (Goldberg, 1995, p. 4)
- (6) Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency. (Goldberg, 2006, p. 5)
- (7) Multiword expressions (MWEs) are lexical items that: (a) can be decomposed into multiple lexemes; and (b) display lexical, syntactic, semantic, pragmatic and/or statistical idiomaticity. (Baldwin & Kim, 2010, p. 3)
- (8) by and large, hot dog, pull one's leg (asialex Newsletter, Jan 18th, 2023 ⁶)
- (9) pay a visit (Ibid.)

2.2 Neologisms: New Pairings of the Old Wine (Meaning) and an Old Bottle (Form)

In the present research, a neologism perspective is also adopted to analyze relatively new collocations, in particular newly-established pairings of already-existing words with predictable meanings. A neologism is a new word, morphologically from Greek *neo-* "new" and *logos* "word" (Kerremans, 2012, p. 15). The novelty of neologisms has a time dimension (Plag, 2003) and is a subjective speaker-perception phenomenon (Fischer, 1998; Kerremans, 2012). Furthermore, another essential aspect of the novelty of neologisms is the frequency⁷ of the new form-meaning pairings, as elaborated in (10) below (Kerremans, 2012). To summarize, based on the above, the newness of neologisms can be exhibited

- (a) both in form and meaning, or the new-winein-a-new-bottle type;
- (b) in meaning only, or the new-wine-in-an-oldbottle type;
- (c) in collocation, the new pairing of the oldwine-and-an-old-bottle type.

The last newness in collocation corresponds to the core of the discussion and observation in the present paper.

(10) Therefore neologisms in this study are defined as form-meaning parings (in one of the three possible combinations), i.e. lexical units, that have been manifested in use and thus are no longer nonce-formations, but have not yet occurred frequently and are not widespread enough in a given period have become part and parcel of the lexicon of the speech community and the majority of its members.

(Kerremans, 2012, pp. 31-2)

2.3 Eat and Medicine in Dictionaries

This section first encompasses the definitions and collocations of the English verb eat in dictionaries, such as OED (Second Edition), OALD Online, and MWD Online. As shown in (11) and (12) below ⁸, this research examines only the target usages of the transitive verb eat describing bodily gestures (referred to as target usages of eat hereafter), excluding any figurative or idiomatic use in such collocations as dog eat dog, eat somebody alive, and eat dirt⁹. The dictionary definitions of eat are summarized as Type A and Type B in Table 1 below by three parameters, an Object, an Instrument, and a Subevent. In table 1 the activity of *eating* is further decomposed into a series of three subevents, take into the mouth, masticate or bite, and swallow. Type A in Table

1, the primary usage of the verb *eat*, is further illustrated from the objects' viewpoint by (13), a list of objects in the "*eat* + NP" collocation in OALD and MWD. The summary in Table 1 also approximately matches the features of "corporeal verbs" dealing with bodily gestures (Dixon, 2005, p. 134). Dixon (2005, pp. 134–5) points out that corporeal verbs all involve a human role (which may be extended to animals) in subject relation and that some corporeal verbs may have substance in object relation¹⁰.

- (11) To take into the mouth piecemeal, and masticate and swallow as food; to consume as food. Usually of solids only. (OED, CD-ROM, Second Edition, 1989)
- (12) Of liquid or semifluid food. Now chiefly with reference to soup, or other similar food for which a spoon is used. (Ibid.)
- (13) (enough) food, meat, (a big) breakfast, lunch, dinner, another thing, a pizzeria, something (OALD, MWD)

This section then explores the "VP + *medicine*" collocation in OALD Online and The Kenkyusha Dictionary of English Collocations (2021). Sixteen verbs or verb phrases that collocate with (*a*) *medicine*, (*the*) *medicine*(*s*), *sb's medicine*(*s*) and so forth are observed in the two dictionaries. The verbs or verb phrases can be classified into two groups, as in (14) and (15) below, the verbs in (15) being directly related to an action of consuming

oral medicine in Part 1. In addition to the verbs *take* and *swallow*, even the verb *drink*, which is restricted to liquid medicine, is witnessed, yet we still cannot find any cue or support for elaborating the marked use of *eat your medicine*.

- (14) administer, ask for, develop, dispense, give, make up, mix, practice, prepare, prescribe, provide, read, study
- (15) drink¹¹, swallow, take

3. TYPE A: The Primary Usage of Eat

Type A, the primary usage of eat, is further examined by three parameters in Table 1. First, the Object of eat of Type A is usually solid foods such as a pizzeria in (13) or as defined in (11), referred to as "eat + NP (solid)." Further, the Object can be solid foods served with liquid or drink, such as lunch and dinner in (13), referred to as "eat + NP (mix of solid and liquid)" or "eat + NP (mix)" for short. The Object can also be solid foods containing much water as in (16), referred to as "eat + NP(solid containing much liquid)." The Object can even be something or another thing in (13) whose state you cannot verify or which does not promise to be in a liquid state explicitly, referred to as "eat + NP (non-liquid). To sum up, the Object of eat of Type A is thus flagged as a Complicated Object.

(16) Every time you <u>eat food</u>, you <u>eat water</u>, and water is a by-product of the cells' work. Can

Туре	Object	Instrument	Subevent 1	Subevent 2	Subevent 3
A = (11)	solid food,	implied	take into the mouth	masticate, bite(optional)	swallow
B = (12)	liquid, semifluid	required	take into the mouth	Not exist	swallow

Table 1 Parameters in the eat Collocations

you think of foods that contain a lot of water? You probably guessed tomatoes, oranges, and watermelon.

> (Google Books, What's to Eat? And Other Questions Kids Ask about Food)

This paper asserts that the "eat + NP (mix)" collocation above can also apply to the "eat your medicine + food" collocation as below. In (17), a variant of "eat + NP (mix of solid and liquid)," i.e., "eat + NP (mix of medicine and food)" is observed. The verb *eat* is put inside the quotation marks, which could indicate a marked use of the verb. While take the medicine with hot water in (19) is considered standard or unmarked in the world where we live, eat medicine with these things in (18) and eat it with milk, orange juice, or anything else in (19) are two other variants of the "eat + NP (mix)" collocation. In summary, the verb eat generally tends to permit Complicated Objects even when the Complicated Objects contain liquid or the NP of medicine.

(17) Indeed, any family that "owns" medicine for twins and has undergone the requisite series of rites, can <u>"eat" the medicine and food</u> prepared by other twin families.

> (Google Books, Making Kedjom Medicine: A History of Public Health and Well-being in Cameroon)

(18) Never <u>eat medicine with these things</u> (headline)

(https://www.newscrab.com/lifestyle/Never-Eat -Medicine-With-These-Things/cid7235157.htm)

(19) If the doctor has told to <u>take the medicine</u> with hot water, then some people <u>eat it with</u> milk, <u>orange juice</u>, or anything else. By doing this you are playing with your health. So let us know with which things medicines should not be consumed. (Ibid.) Then, the Instrument of *eat* of Type A, being implicit in many cases and being explicit sometimes as in (20), is almost free of any constraints if semantically appropriate in its context. As common sense in our world, we can easily imagine a scene of eating solid food with an Instrument, a knife, a fork, chopsticks, or even a hand as an Instrument in some cultures. This also helps us better understand the necessity of Instruments when we *eat* something which is of mixed type, as in Complicated Objects b, b' and c in Table 2. Therefore, an Instrument is implied by an Object, which leads to the optionality of an Instrument in Type A in Table 2.

(20) to eat with a knife and fork (OALD)

Finally, the focus of discussion is placed on the third parameter, Subevents. The necessity or unnecessity of Subevents 1 to 3 is clarified by example (21) depicting the process of eating hard candies and ice cubes. The vivid description of an eating process in fine detail demonstrates that Subevents 1 and 3 are required to realize an action of *eating* while Subevent 2 is optional and open to individuals' respective ways of eating. It is the optionality of Subevent 2 in Type A that permits the secondary use of *eat* (Type B), in which Subevent 2 does not exist. This will be thoroughly discussed in Part Four that follows.

(21) We can see there are two groups of people -- who eat fast and who eat slow, when we <u>eat hard candies and ice cubes</u>. One group pf people exhibits that the moment they drop a hard candy into their mouth, they break up the candy right away into million pieces with loud noise and swallow it down. It takes only a few seconds for the candy to disappear from their month. The same thing happens with ice cube. Why do they have to break up an ice cube into million pieces? It takes only a few seconds also to disappear. And the second group, the people who <u>eat a candy</u> slow and may take forever to finish one "stupid" candy. It stays in the mouth and melts away microscopically, one molecule of the candy at a time. The same thing happens with ice cube also. The ice cube stays in these people's mouths forever, one water molecule at a time until it melts down. And finally it disappears.

(Google Books, A Life with Good Health)

Therefore, the parameters in the *eat* collocations of Type A are revised as in Table 2. In Type A in Table 2 the verb *eat* permits various objects in addition to solid objects and requires only two parameters, Objects and Subevents (1 and 3) semantically or conceptually. Part Three thus concludes that Complicated Object b', i.e., a variant of Complicated Object b in Table 2, partially supports the novel collocation "eat your medicine," a discussion initiated in Part One. The *eat your medicine* collocations will be further observed and analyzed in the parts that follow.

4. TYPE B: The Secondary Usage of Eat

The parameters of Type B, the secondary usage of eat, are studied in depth in this part. In Type B, the Object, contrary to that in Type A, is limited to liquid or semifluid food as in (12) in Part Two and is thus labeled as a Simplified Object in this study. A typical example of a Simplified Object is soup, as in (22) below. When the VP eat soup is used in (22), the writer designates implicitly but definitely that you eat soup with an Instrument, such as a spoon. Otherwise, the verb drink is preferred instead, as in (23) and (24), in which people drink the soup directly from the bowl without using any Instrument. The final parameter of Subevent in Type B can be verified in the same way as Type A, in which only Subevents 1 and 3 are required. From the above, the indispensable parameters in the eat collocations of Type B can be summarized in Table 3 below.

(22) When you <u>eat soup</u>, you shouldn't make slurping sounds.

(Eijiro on the Web)

(23) Instead, people raise up their bowls and <u>drink</u> the soup directly from the bowl.

(Google Books, Theory of User Engineering)

Туре	Complicated Object	Subevent 1	Subevent 3
А	a. solid b. mix of solid and liquid (multiple items) b.' mix of medicine and food (multiple items) c. solid containing liquid (single item) d. non-liquid	take into the mouth	swallow

Table 2 Parameters in the eat Collocations of Ty	pe A
--	------

Table 3	Parameters in	the	eat Collocations	of 7	Туре В
---------	---------------	-----	------------------	------	--------

Туре	Si	implified Object	Subevent 1	Subevent 3
В	a. liquid b. semifluid		take into the mouth	swallow

(24) While drinking the broth in a soup noodle dish, a spoon can be of assistance, though it is not indispensable because one can raise the bowl to the mouth and <u>drink the soup</u> directly. (Google Books, *Chopsticks*)

This paper contends that Type B, the secondary usage of eat, is applicable to the collocation eat a bowl of tea in (25) below. It is hypothesized that the unique combination of eat a bowl of tea in (25) below implies that the patient eats the bowl of tea with an Instrument such as a spoon. Written by Louis Hing Chu, the 1961 novel Eat a Bowl of Tea is praised as "the first Chinese American novel realistically portraying Chinatown's 'bachelor society" in New York after World War II (Han, 2016, p. 34). In this title, the unique collocation, eat a bowl of tea, appears in the novel several times, as in (25) below. In (25), the collocation eat a bowl of tea is first uttered by a herb doctor as medical advice for the patient, Ben Loy, who gets surprised and repeats the exact phrase reflexively. Also, the immediate context of the collocation in (25), referring to the underlined part, indicates that tea, which takes three hours to brew, is somewhat different from the tea we drink in our everyday life. This hypothesis can be further supported by a related context in the novel, as in (26). The tea in the novel is thick, bitter or in a semifluid state, and is virtually medicine for Ben Loy to "regain his vigor."

(25) When Ben Loy had finished, the doctor smiled and said, "I was young once. I understand." He pointed to the pillow on the desk, and Ben Loy obligingly placed his wrist, with palm up, on the tiny black pillow. The doctor proceeded to feel his pulse, first on one wrist and then on the other. "Doctor ... do ... do you think ...?" "Eat a bowl of tea and we'll get you on the way to recovery," said the doctor. "<u>Eat a bowl of tea</u>?" asked the skeptical Ben Loy. "Yes, <u>eat a bowl of tea</u>," smiled the doctor. "<u>Can you come back in about three hours? It</u> <u>takes that long to brew the tea</u>." "I'll be back in three hours," said Ben Loy excitedly and left.

(Google Books, Eat a Bowl of Tea)

(26) He had been going to the herbalist faithfully for many weeks. He was determined to do anything to regain his vigor. <u>The thick, black, bitter</u> <u>tea</u> was not easy to swallow, but he kept going back to the herb doctor uncomplainingly.

(Google Books, Eat a Bowl of Tea)

5. TYPE C: A Newly Proposed Third Usage of *Eat*

In this study, Type C is proposed to indicate the new collocation, i.e., the "eat + NP (medicine Ø) collocation, an example of "a new pairing of old wine and an old bottle." The advent of this novel collocation is motivated by language users' creativeness and conservativeness. Language speakers are consistently "creative," "expressive and efficient" (Goldberg, 2019, p. 6), thus are always willing and ready to satisfy the social needs by creating new collocations by such logic as reanalysis (Hopper & Traugott, 2003); meanwhile, speakers are conservative in "conforming to the conventions of their speech communities" (Goldberg, 2019, p. 6) by analogy (Hopper & Traugott, 2003). As mentioned above, the speaker's creativeness and conservativeness in new collocations correspond to reanalysis and analogy in grammaticalization, respectively.

We state that Type C, the newly proposed third usage of *eat* in the "*eat* + NP (*medicine* \emptyset)" collocation, is triggered by an increasingly wide-spread social concept of "*food is medicine*" as in (3) and (4) in Part One. Example (3) is the title of a book written by Dr. Hyman, while example (4) is a quote from Dr. Hyman's official homepage.

Both are based on the "food is medicine" concept, as detailed in (27), (28) and (29) by Dr. Hyman. Eat your medicine is a societally impactful catchphrase because the emphasis on the importance of food and medicine in our life is concentrated in one single collocation. The "eat + NP (medicine ø)" collocation, covering eat the medicine, eat your medicine and eat medicine, is displaying a steady increase in its usage frequency over the past years, according to GBNV, as illustrated in Fig. 1 below. The increasing popularity of this healthcare management stems from the fact that Dr Hyman's concept of "food is medicine" conforms to the traditional western postulation that food is your medicine; and medicine is your food by Hippocrates, an ancient Greek physician in 400 BC (Siton, 2021) and also to the traditional Oriental philosophy of isyoku dogen in Japanese or yaoshi tongyuan in Chinese, literally both food and medicine (help preserve the health and) have the same source.

(27) Food isn't like medicine, it is medicine, and it's our number one tool for creating the

vibrant health we deserve.

(https://drhyman.com/, attested on August 6th, 2022)

(28) Here are a few tips to put healing medicines in your diet without swallowing a pill. If there were a better drug on the marketing I would prescribe it, but there isn't, so <u>eat your medicine</u> every day.

(https://drhyman.com/blog/2011/10/14/ eat-your-medicine-food-as-pharmacology/) (29) The word for eating in Chinese is comprised

of two characters: *chi fan*, or eat rice. The word for taking medicine is *chi yao*, or eat medicine. The ancient culinary traditions of China created meals for pleasure as well as healing. (Ibid.)

Type C, the third usage of *eat*, is also motivated and supported by conventional collocations related to the Complicated Object in Type A and the optionality of Subevent 2 in Type A and Type B, as discussed in Part Three and Part Four. Although relatively new, Type C respects syntactic-semantic

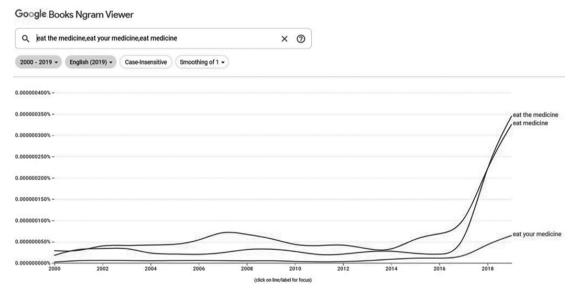


Fig. 1 Transition of eat the medicine, eat your medicine and eat medicine between 2000 and 2019

rules for the Complicated Object in Type A and the optionality of Subevent 2 in Types A and B, but differs from Type B in that the Object of Type C is literally medicine. It is hypothesized that the collocations such as "eat" the medicine and food in (17) in Type A play a transitional role in spurring the viral spread of the new collocations such as eat your medicine in Type C. Further, with medicine being perceived as food in its speaker's conceptual field, the "eat + NP (medicine ø)" collocation is assigned new and distinct functions to intensify the importance of foods; as a result, speakers "are willing to extend verbs for use in the alternative construction in order to better express their intended messages" (Goldberg, 2019, p. 121). Thus, Type C has confronted less resistance from the conventional rules in its speech community and has achieved a remarkable increase in usage frequency over the past years, especially around 2016, as revealed in Fig. 1. In short, the parameters of the *eat* collocations of Type C can thus be summed up in Table 4 below.

At the present phase, the "eat + NP (medicine ø)" collocations, such as eat your medicine, are much newer than the old and conventional collocation, take your medicine, and are not entirely institutionalized yet. The new collocations at this stage tend to appear more in block language, which "appears in such functions as labels, titles, newspaper headlines, headings, notices, advertisements" (Quirk et al., 1985, p. 845) and slogans, catchphrases, packages, names of TV or radio shows, as in (3) in Part One, (30) below, and Fig. 2 exhibiting a master package below. The forms of block language can be incompletely created sentences or verbless sentences (strictly collocations or clusters) and often permit more freedom in syntax if the intended message in the context

Table 4 Parameters in the eat Collocations of Type C

Туре	Perceived Object	Subevent 1	Subevent 3
С	<i>medicine</i> conceptually perceived as <i>food</i>	take into the mouth	swallow



Master Package: Eat Your Medicine

Eat Your Medicine: Pegan Diet with Mark Hyman MD, Master Package: Program DVD + Hardcover Book + Companion Guide + Diet Pocket Guide + Diet Recipe Guide + Optimal Health DVD + Sleep Master Class + Poster Minimum Donation: **\$240.00 or \$20.00 Monthly** Shipping and Handling: **\$7.00** Total: **\$247.00**

Fig. 2 Master Package: Eat Your Medicine (apt homepage)

Table 5 A Comparison between "*eat* + NP (*medicine*)" and "*take* + NP (*medicine*)" based on Google Books Search (Attested around 9:30 am, March 16th, 2023)

	eat	take
your medicine	1,580	71,000
medicine	2,650	138,000
the medicine	13,300	234,000

is undoubtedly conveyed. Statistically, a Google Books search result displays that the *eat (your, the) medicine* collocations were utterly outnumbered by the *take (your, the) medicine* collocations, as shown in Table 5. Specifically, the number of *take the medicine* in Table 5 was almost 17-fold as many as that of *eat the medicine*, further showing that the *eat your medicine* collocation is spreading virally yet not institutionalized.

(30) <u>Eat Your Medicine</u>: The Pegan Diet with Mark Hyman MD

(a KCTS9 TV show attested on August 6th, 2022 in Seattle, USA)

6. CONCLUSION

So far, we have discussed the marked usage of a new collocation, *eat your medicine* and its increasing frequency in use according to GBNV over the past years in the light of syntax-semantics and social functions. The usages of the verb *eat* were divided into three groups in this paper, Type A and Type B from a syntactic-semantic viewpoint in Parts Three and Four, and Type C from the viewpoint of social functions in Part Five. The parameters in the *eat* collocations of three types were substantiated to solve the *eat your medicine* puzzle effectively.

Three types of the *eat* collocations are summarized in Table 6 above according to three parameters, an Object, an Instrument, and Subevents. The Object plays a distinctively different role in each of the three Types. Type A permits various Complicated Objects, as in Table 2, whereas Type B and Type C allow only limited objects, respectively. As to an Instrument, Type A implies the use of an Instrument, Type B requires the use of an Instrument implicitly or explicitly, and in Type C an Instrument is optional. In all types, Subevents 1 and 3 are mandatory, while Subevent 2 is optional. We are aware that a closer examination and more detailed discussion should be executed, and a diachronic perspective based on more corpus data is required in the continuing research of this study.

NOTES

- 1 Discussion on the idiomatic use of *take your medicine* is not developed in this research.
- 2 Further discussion on Japanese and Chinese equivalents is omitted for want of space.
- 3 Refer to Part Five of this paper for details.
- 4 MWD stands for Merriam-Webster Dictionary. Refer to https://www.merriam-webster.com/ for more information.
- 5 OALD stands for Oxford Advanced Learner's Dictionary. For more information, refer to https:// www.oxfordlearnersdictionaries.com/.
- 6 Refer to asialex Newsletter dated Jan 18th, 2023 for details.
- 7 *"But me no buts."* is considered a typical example of nonce-formations due to its low frequency.
- 8 Regarding the target usages of *eat*, only (11) is found in OALD Online and MWD Online.
- 9 Refer to https://www.oxfordlearnersdictionaries. com/ for details.
- 10 Dixon (2005) also points out that *eat* can be followed by a direct object but not a cognate object (p. 125)
- 11 The verb drink is limited to liquid medicine accord-

Туре	Object	Instrument	Subevent 1	Subevent 2	Subevent 3
А	Complicated	Implied	take into the mouth	optional	swallow
В	Simplified	Required	take into the mouth	not exist	swallow
С	Perceived	Optional	take into the mouth	optional	swallow

Table 6 Revised Parameters in the eat Collocations

ing to The Kenkyusha dictionary of English collocations (2021, p. 1542)

REFERENCES

- Baldwin, T. & S. N. Kim (2010) Multiword Expressions, in Nitin Indurkhya and Fred J. Damerau (eds.) *Handbook of natural language processing (Second Edition)*, Boca Raton: CRC Press, pp. 267–292. (Retrieved Feb. 18th, 2023, from https://people.eng. unimelb.edu.au/tbaldwin/pubs/handbook2009.pdf)
- Dixon, R. M. W. (2005) A semantic approach to English grammar. New York: Oxford University Press.
- Fischer, R. (1998) Lexical change in present-day English: A corpus-based study of the motivation, institutionalization, and productivity of creative neologisms. Tubingen: Narr.
- Goldberg, A. E. (1995) *Constructions: A construction* grammar approach to argument structure. Chicago: Chicago University Press.
- Goldberg, A. E. (2006) *Constructions at work: The nature of generalization in language.* Oxford: Oxford University Press.
- Goldberg, A. E. (2019) *Explain me this: Creativity, competition, and the partial productivity of constructions.* Princeton: Princeton University.
- Han, Q. (2016) The cinematic representation of the Chinese American family. Newcastle upon Tyne: Cambridge Scholars Publishing. (Retrieved Feb. 13th, 2023, from Google Books)
- Hopper, P. J. & Traugott, E. C. (2003) Grammaticalization (2nd edition). Cambridge: Cambridge University Press.
- Hyman, M. (2021) *The Pegan diet: 21 practical principles for reclaiming your health in a nutritionally confusing world.* New York: Little, Brown Spark.
- Kerremans, D. (2012) A web of new words: A corpusbased study of the conventionalization process of English neologisms. Frankfurt am Main: Peter Lang Pub Inc.
- Plag, I. (2003) *Word formation in English*. Cambridge: Cambridge University Press.
- Quirk, R. et al. (1985) A comprehensive grammar of the English language. London: Longman.
- Siton, G. (2021) Your Body is a Self-Healing Machine: Understanding How Epigenetics Heals you. Franklin: Clovercroft Publishing. (Retrieved March 3rd, 2023, from https://www.google.co.jp/books/edition/Your_ Body_Is_a_Self_Healing_Machine_Book/rITbzQE ACAAJ?hl=en)

DATA, RESOURCES, and DICTIONARIES

apt homepage (Retrieved March 16th, 2023, from https://aptv.org/donation/FD6/)

- asialex Newsletter (2023, Jan 18th) (Retrieved Feb 28th, 2023)
- COCA (Retrieved Feb 18th, 2023, from https://www. english-corpora.org/coca/)
- Eijiro on the Web (Retrieved March 1st, 2023, from https://eowp.alc.co.jp/)
- Google Books (Retrieved Feb. 13th, 2023, from https://books.google.com/)
- Google Books Ngram Viewer (Retrieved Feb. 13th, 2023, from https://books.google.com/ngrams/)
- https://drhyman.com/blog/2011/10/14/eat-yourmedicine-food-as-pharmacology/(Retrieved Feb. 26th, 2023)
- https://www.newscrab.com/lifestyle/Never-Eat-Medicine-With-These-Things/cid7235157.htm (Retrieved March. 3rd, 2023)
- Merriam-Webster Dictionary Online (Retrieved Feb. 26th, 2023, from https://www.merriam-webster.com/)
- Online Etymology Dictionary (Retrieved Feb 18th, 2023, from https://www.etymonline.com/)
- Oxford Advanced Learners' Dictionary Online (Retrieved Feb 26th, 2023, from https://www.
- oxfordlearnersdictionaries.com/)
- Oxford Collocations Dictionary for Students of English (2009)
- Oxford English Dictionary, CD-ROM, Second Edition, 1989
- The Kenkyusha Dictionary of English Collocations (2021)

要旨

「薬を服用すること」は、日本語では「薬を飲む」、中 国語では「薬を食べる」("吃药")と言うのに対して、英 語では「薬をとる」(take medicine)と表現するのは一般 的とされてきた。"food isn't like medicine, it is medicine" (Mark Hyman)の健康理念に基づき新しくできたコロ ケーション eat your medicine について、目的語・道具・ 下位事象という三つのパラメータを設けて、これまで 先行研究における動詞 eat の用法を再分類してできた Type A 用法と Type B 用法に加え、新たに Type C 用法を 提案し、統語意味論や社会機能的な観点から、そのメ カニズムを明らかにすることを試みる。