Dietary Supplements Questioned in the Polish Notification Procedure upon the Basis of Data from the National Register of Functional Foods and the European System of the RASFF

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Abstract: Dietary supplements (DS) in the countries of the European Union falls within the scope of the food law. DS may, however, contain substances that are simultaneously applied in medicinal products as defined in the pharmaceutical law. The presence of such ingredients may cause problems with the product qualification. The phenomenon of applying such borderline ingredients in dietary supplements may require additional regulations, and ensuring them may be problematic. We conducted an analysis aiming to identify dishonest market practices resorted to by the producers and distributors of non-conforming dietary supplements. We examined mostly questioned DS and compared them with data from the RASFF system and registers of medicinal substances and pharmaceutical entities. The results show that some operators tend to re-notify the same products in response to the initiation of official control procedures. Products in the form of capsules or powders were the most common re-notifications within the 50–100 days. Based on the data obtained, it can be concluded that some entities are obliged to document the safety of the product or its compliance with the regulations, use the imperfection of the notification procedure, and re-notify the questioned product in order to keep it on the market despite potential non-compliance.

Keywords: dietary supplements; RASFF; GIS; notification

1. Introduction

Dietary supplements (DS) production and trading in the countries of the European Union falls within the scope of a number of the legal regulations generally referred to as the “food law”. Particular laws regulate actions conducted at the consecutive stages of the food chain to a different degree at the national and European Union levels [1].

DS may, however, contain substances that are simultaneously applied in medicinal products as defined in the pharmaceutical law, which, as a matter of principle, is not applicable to dietary supplements. This is particularly noticeable in the group of products of botanical origin. The presence of such ingredients may cause problems within the scope of deciding whether a product is a dietary supplement or a drug. Such products and/or ingredients are referred to as “borderline” [2], and the popularity of such ingredients to a substantial degree depends upon consumer awareness within the scope of connections between diet and health [3]. Nevertheless, this is not the exclusively relevant factor. Even though fortified food (for instance, those fortified by means of the addition of vitamins) is not perceived by some consumers as food products that can improve the state of health,
nevertheless, dietary supplements, due to their form, may be regarded as products having an actual influence upon the state of health more frequently than other fortified food products just like medicinal products [4].

The phenomenon of applying borderline ingredients in dietary supplements seems, therefore, to be an area requiring additional attention and regulations, and ensuring them may be problematic. Formally, dietary supplements are food products, and additional legal restrictions may have a negative influence on other aspects relevant to the food trade [5]. Moreover, determining certain legal frameworks rendering it possible to qualify, at least to a degree, the products discussed herein without additional consideration is not reflected in the decisions of the Court of Justice of the European Union, which adheres to the view that doubts relevant to the classification (food-pharma) in relation to borderline products ought to be resolved on a case-by-case basis [6,7].

Such an approach may, nevertheless, result in violating the rule of the free movement of goods by having the same product classified differently in different countries. This may be observed in the instance of melatonin, which is found to be a dietary supplement in France in the case of a dose of up to 2 mg, whereas in Poland, it is exclusively in the case of a dose not exceeding 1 mg; in turn, in the Czech Republic it is not legal to add it to dietary supplements [8].

To a certain degree, monitoring trade in dietary supplements that may have a different status in the particular member countries of the European Union (MS) is ensured by the Rapid Alert System for Food and Feed (RASFF) [8]. The role of the RASFF is to ensure the exchange of information on the presence of hazardous or illegal food products in the market between the member states. The data in this system, regardless of certain limits, may be useful within the scope of developing a food supervision policy; they also contribute to maintaining a high level of consumer awareness within the scope of existing hazards [9].

In the context of the legislative discrepancies described herein, attention is worth paying to significant differences between dietary supplements and medicinal products to mention, but the process of registration and obtaining a marketing authorisation (Figure 1). The basic difference is that, as indicated by the name itself, the marketing authorisation (common procedure) of a medicinal product may render it marketable all over the EU and, therefore, be valid in the member states of the EU, even though it renders the procedure more time-consuming. Assessing an application relevant to a new drug may require up to 210 “active” days. This period of time is interrupted by at least a single “stop-clock”, during which an applicant prepares answers to the questions asked by the Committee for Medicinal Products for Human Use (CHMP). The clock is stopped after the 120th day, and another “stop-clock” is also possibly performed after the 180th day when the CHMP accepts a list of queries or unresolved issues, which ought to be seen by the company submitting an application. The assessment results issue an opinion by the CHMP by the 210th day. After that occurs, after 67 days, the European Commission usually makes a decision (issuing legally binding permission) [10].

Our earlier research led to the conclusion that the national register of functional foods, such as the RASFF, may be a valuable source of information in the process of the self-regulation of the market of dietary supplements in Poland; nevertheless, further research in relation to particular ingredients is worth undertaking. An analysis in that direction may help to identify dishonest market practices resorted to by the producers and distributors of non-conforming products [11]. This is of particular significance as we are observing an increase in dishonest market practices, the purpose of which is to generate more profits from the sale of fraudulent dietary supplements or misleadingly advertised [12] while their effective detection causes many difficulties, caused, among others, by lack of data on newly launched products on the market [13].

Because there is an extensive system of notification relevant to newly launched functional products in Poland, and that system concerns, in particular, dietary
supplements, upon the basis of the data from this system, we conducted an analysis aiming to:

1. Verify whether ingredients that may be conclusively classified as food or as medicinal products more frequently in comparison with other ingredients are entered into the national register as potentially non-conforming. Taking into consideration the form of researched products and also the resultant higher level of consumer trust in the aspect of its effectiveness in maintaining and improving the state of health, we presume that the presence of double-classified ingredients will predominantly be a reason for the CSI to initiate preliminary proceedings;

2. Assess the participation of producers entered simultaneously in the national register of functional foods and also the national Register of Manufacturers and Importers of Medicinal Products, launching borderline ingredients as dietary supplements. We assumed that, as professional entities acquainted with the requirements of both of the markets (food-pharma), they will ensure that the food products launched by them will be relatively rarely found to be controversial or potentially non-conforming;

3. Identify dishonest practices, the objective of which is to continue trading in products that are potentially non-conforming to the food law;

4. Assess if there is a qualitative correlation between the causes of non-conformities in the national register and a category of notifications in the RASFF. We expect that due to a common system of notification and a clear procedure of reacting in the case of disclosing a potential non-conformity of a product is the subject of notification with the food law, the notifications relevant to exporting/importing products categorised in the RASFF as “Dietetic foods, food supplements and fortified foods”, “Composition” will be relatively rarely indicated as a hazard category.
**Figure 1.** Scheme of the notification procedure of a dietary supplement in Poland in comparison with registering a medicinal product in the “common procedure” mode in the European Union, taking the relevant timeline under consideration.

*The Procedure for Notifying Dietary Supplements Newly Launched to the Market*

In Poland, an entrepreneur wishing to launch a dietary supplement is obliged to notify the Chief Sanitary Inspector (CSI) of this intention with the use of electronic means of communication. An effective notification (i.e., signed by the authorised representative of an entity) renders it possible to commence the distribution and sale of a product the moment it is submitted. On the day following the notification being registered, data relevant to the product of which the Chief Sanitary Inspector has been notified are entered into the (national) electronic register of functional foods, and an entrepreneur receives an e-mail message informing them that a product has been entered into the register in question [14,15].

The Chief Sanitary Inspector’s prerogatives include the right to verify the quality of a product, in particular, in the aspect of its safety [14]. If the analysis of the submitted notification conducted by the Chief Sanitary Inspector does not give rise to doubts, an entrepreneur receives information that a product has been registered effectively. Nevertheless, if it is found that certain areas need a more profound analysis, preliminary proceedings can be initiated. These may take one of the two following courses, depending upon possible non-conformities. If a product’s non-conformity is unquestionable, for instance, if a product contains an ingredient that is not regarded as food whatsoever, the Chief Sanitary Inspector informs an entrepreneur and a competent state–county sanitary inspector (SCSI) in charge of the area on which an entrepreneur has their registered address. In the further course of the matters, an entrepreneur is obliged to withdraw a product conforming to an administrative decision issued by the state county sanitary inspector [16].

If it is found to be necessary to provide additional clarification on controversial issues, the Chief Sanitary Inspector also informs both the entrepreneur and a competent state–county sanitary inspector. In that case, the regional supervisory body issues a decision that trading in the product is to be temporarily suspended or, in extreme cases, that the product is recalled. In this latter case, an entrepreneur is obliged to take steps to collect the products in question from the entities with which it has contracts and which have purchased the product for the purpose of sales. In its decision, the Chief Sanitary Inspector itemises possible non-conformities and requests that a food market entity obtains an additional scientific assessment or present additional data [17].

If an entrepreneur receives a positive assessment from a scientific institution or presents exhaustive additional documents, the Chief Sanitary Inspector ought to conclude the preliminary proceedings, notifying a competent state–county sanitary inspector, and that ought to result in a trade ban being repealed. Nevertheless, it is worth emphasising that the course of the procedures described herein is not set forth explicitly in the relevant regulations but rather constitutes a logical course of events in the light of the administrative law regulations in force in Poland [18]. It goes without saying that if a product is indeed found to be non-conforming and violating the food law regulations, a responsible entity ought to stop selling and distributing it [14]. The course of a notification procedure is presented in Figure 2.
2. Materials and Methods

2.1. Materials

2.1.1. The National Register of Functional Foods

For the purpose of research, the national register of functional products for the period 5th February 2020–8th April 2022 was applied. The data for 2020 reflect the state as of 21st March 2021, whereas the data for 2021 (1st January 2021–28th November 2021) were collected on 28th November 2021. The data for the period 29th November 2021–8th April 2022 were acquired on 10th April 2022.
The data available in the register also cover an earlier period starting in 2007; nevertheless, in January 2020, an amendment was made to an ordinance [19], which actually entered into force in February. The amendment to the national regulation aimed to facilitate making notifications, but without substantive changes in the notification procedure itself. One of the changes was introducing drop-down lists of ingredients other than vitamins and minerals, including botanical ingredients, in the electronic notification form in place of the previous fields requiring the manual filling of the ingredient name. The above-mentioned change improved the quality of data in the register; in particular, it eliminated the double-entering of the same ingredient by registering it under synonymical or similar names (for instance, an extract of the seeds of milk thistle and an extract of milk thistle seeds).

2.1.2. The register of medicinal products and the National Register of Manufacturers and Importers of Medicinal Products

Substances qualified as medicinal were determined upon the basis of the register of medicinal products as of 24th March 2022, whereas entrepreneurs and importers of medicinal products were identified upon the basis of the National Register of Manufacturers and Importers of Medicinal Products (MIMP) as of 23rd March 2022.

2.1.3. RASFF

In order to achieve the objective of research within the scope of the RASFF, the data were acquired from it in the .csv format relevant to notifications in the system in the period 2020–2022. They were exclusively the data relevant to the group of “dietetic food, food supplements (…)” that were taken under consideration, and 671 notifications were thus identified. In the further course, their number was limited to those indicating Poland as a “notifying country” and/or “subject”.

2.2. Methods

2.2.1. Selecting Products and Ingredients for Research

Exclusively notifications relevant to products containing a single active ingredient hereinbelow referred to as “single-ingredient”, were selected (Figure 3.).

![Figure 3](image.png)

**Figure 3.** Scheme of input data for the analysis of the national registry.

It was ascertained that there were 8750 such products with 693 unique ingredients in the register in the analysed period of time. In the further course, those ingredients that
had the highest potential non-conformity with the regulations of the food law applicable
to functional food products were selected. For this purpose, the ABC method was applied;
5% of ingredients were arranged by a decreasing number of notifications reviewed and
found to be potentially non-conforming and were qualified for further research. One of
the following statuses was granted: “Does not meet the definition or requirements rele-
vant to the proposed qualifications”, “The procedure was abandoned, the company with-
drew from placing on the market”, “Proceedings Underway”, “Contains Not Permitted
Ingredient”, “The product was abandoned on the market”.

For the purpose of further research, 35 ingredients in 4165 single-ingredient prod-
ucts, which were questioned by the competent authority in 466 cases altogether, were se-
lected.

2.2.2. Determining Borderline Ingredients

Each of the ingredients selected for analysis was assessed separately within the scope
of being present simultaneously on the list of active substances marketable in Poland in
the aspect of the pharmaceutical market. The assessment was conducted by means of
searching the field “active substance” manually in the register of medicinal products (key: Table 1).

Table 1. Specifications of words upon the basis of which ingredients were classified as borderline.
2.2.3. Identifying Entities in Both of the Registers

In order to establish whether the analysed single-ingredient products are launched as well by entities in the market of trade in medicinal substances, the analysis was conducted with the use of the method of Text Mining and Text Miner in Statistica 13.1 (Statsoft). The methodology applied was identical to that described in the previous research of the authors [20]. The assessment also included the list of single-ingredient products acquired in accordance with the previous description. The criteria of analysis included: finding in the field “submitting entity” in the national register of the main parts of the name (i.e., for instance, the main part of the name for Pharmaucetial Company “A” Ltd. was A) of entities in the register of the producers and importers of medicinal products. In the first step, 229 entities from the register of the producers and importers of medicinal products were analysed. All research and scientific (16), veterinary (1), and health care entities (26) were excluded from the analysis. The entities that had a common, characteristic element of the name were also excluded, which, with the described method, made it impossible to automatically distinguish these entities in the national register (8).

2.2.4. Assessment of the Activity of Entrepreneurs after Granting the Status of Potential Non-Conformity to the Notification

An assessment of the occurrence of the repeated submission of notification in the register was conducted. Exclusively entries to the register following earlier notification labelled as non-conforming and made by the same entity, the subject of which was certainly or highly likely the same product, were selected. The assessment of the similarity of a product was conducted upon the basis of a name and form of a product. Nevertheless, all the cases meeting the above-mentioned criterion, in which case the repeated notification containing information about the status indicated that the notification procedure was completed properly, were excluded. Such cases may indicate that the entity submitting a notification one more time rectified errors or controversies identified by the competent authority when the product was submitted for notification for the first time.

2.2.5. Assessment of Compliance with the RASFF

Upon the basis of the descriptions of notifications in the field “subject”, a notification was generally classified in the aspect of the presence of a particular ingredient or substance, the presence of which is a product was a basis for entering it into the RASFF. It was verified whether a reason for notifying the RASFF is ingredients constituting the subject of research upon the basis of the national register. In the described method, only a manual comparative analysis was used.

3. Results

3.1. Borderline Ingredients

Permitted use in two functions was the case in relation to 25 ingredients: vitamin D, Cannabis sativa L., vitamin C, magnesium, melatonin, vitamin B12, cannabidiol (CBD), cannabinol, carbon, vitamin E, dehydroepiandrosterone (DHEA), vitamin K, zinc, biotin, folic acid, tryptophan, potassium, vitamin A, niacin, propolis, fish oil, selenium, iron, Camellia sinensis (L.) Kuntze (tea plant), and riboflavin (vitamin B2).

Of all the notifications of single-ingredient products granted the status indicating doubts on the part of the food safety authority, 74% are relevant to so-called borderline ingredients. The borderline ingredients with the highest percent of notifications that may indicate non-conformities are vitamin D (17% of notifications with the status indicating uncertainty) and Cannabis sativa L. (10% of notifications).
3.2. The Participation of Producers and Importers of Medicinal Products

Of 35 ingredients, 11 were the subject of a notification by the entities in the National Register of Manufacturers and Importers of Medicinal Products (MIMP). Those were as follows: vitamin D (11% of all notifications), iron (11%), carbon (9%), fish oil (7%), zinc (7%), potassium (6%), vitamin C (5%), vitamin E (4%), biotin (3%), magnesium (2%) and vitamin B12 (1%).

Of the 466 analysed notifications, which were granted the status indicating doubts by the food safety authority, six were made by five different entities from the list of the MIMP. One of the six above-mentioned notifications was relevant to active carbon (as of the day of conducting research, the preliminary procedure is underway). The remaining five notifications concerned vitamin D—one of the entrepreneurs resigned from launching a product, and one was requested to provide additional data, whereas, in relation to two entrepreneurs, the proceedings were underway on the day of conducting our research. One of the entities in whose case the proceedings were underway made a preliminary notification of a product bearing a similar name (Table A1. Vitamin D: 12 December 2021 and 25 March 2021 on products—liposomal vitamin D 4000 IU) approximately 40 days after initiating the proceedings.

3.3. Comebacks Issue

Of the total number of 466 products that qualified for analysis and granted the status indicating non-conformity upon the basis of comparing their name and forms, it was ascertained in 76 cases that after initiating preliminary proceedings or refusing to register, notifying entity register a potentially identical product one more time. This kind of practice was applied by 42 entrepreneurs; therefore, 5% of all the entities (828) submitted notifications in the analysed period. The detailed data are presented in the Appendix A (Table A1).

The phenomenon in question was identified in relation to 24 of 35 selected ingredients, most frequently being products in capsules (35%), liquid forms (26%), in bulk (23%), whereas to the smallest degree, it was relevant to pills and dragees (14%).

In 33 cases, constituting nearly half of all the cases, resubmission was performed within 100 days after the initial submission, and the average time period between the first submission and resubmission was 51 days (median).

Notifications submitted within this period of time were most frequently relevant to liquid forms (15 cases) and capsules (12 cases).

Another period in which the most numerous resubmissions were observed was between 101 and 200 days after the first submission (average time: 148 days). Of 20 such submissions, eight were relevant to products in the form of powder, five in the form of capsules, four in liquid form, and three in the form of pills. The remaining 23 were submitted between the 201st and 300th day (on average, 270th day) after the first submission, and that was true for nine cases; four of them were relevant to products in the form of capsules, four in the form of pills and one the form of liquid, whereas in the period between 301st and 400th day (on average, 353rd day), eight products (namely seven capsules and one pill) were registered one more time. Between 401st and 700th day, six products were submitted for registration.

The products submitted the earliest were dietary supplements in the form of capsules and liquids. In the majority of cases, it was performed throughout the first 100 days. The products last to register one more time were dietary supplements in the form of pills; as it was observed, it was performed in the majority of cases between the 150th and 300th day.

Among the raw materials in relation to which more comeback was registered were Cannabis sativa, vitamin D, magnesium, carbon, vitamin B12, cannabidiol, and also Ganoderma lucidum. With the exception of carbon and Cannabis sativa, most of the comebacks were observed by the 160th day. Products containing carbon were registered one
more time between 120th and 360th day, whereas those containing Cannabis sativa were even after 650th and 700th day (two products, one company).

The entities included in the research most frequently followed the practice described herein exclusively once (29 of 42 observations). Exclusively a few of the producers and/or distributors tended to use this practice of repeated submission more frequently, and that group includes those resubmitting a notification a few times in relation to a single raw material.

In relation to entities from the register of the MIMP, the practice of comeback was observed exclusively in the case of a single producer; nevertheless, it was applied as many as three times in relation to this same product containing vitamin D.

3.4. RASFF and National Register Connections

Analysing the RASFF led, in the initial phase, to selecting 78 submissions, constituting nearly 12% of all notifications in the group of “dietetic foods, food supplements and fortified foods”. The description of 20 of the selected notifications did not render it possible to conclusively determine the reason for finding a product to be non-conforming or hazardous. These submissions were verified by means of analysis from the level of “details” bookmark with the use of the RASFF Window. In the case of seven submissions, cause(s) was (were) established, whereas the 13 remaining were excluded from further analysis.

Twenty-six substances/groups of substances constituting the basis for entering a submission to the RASFF were identified; the detailed share of submissions is presented in the table below. Seven of the above-mentioned 26 groups were selected as relatively not frequent upon the basis of the national register (Table 2).

### Table 2. List of ingredients/group of ingredients constituting the basis to enter a product into the RASFF in the group of “dietetical food (...).”

| Ingredient/Group of Ingredients | Total Count of Each Ingredient/Group of Ingredients in the RASFF |
|---------------------------------|---------------------------------------------------------------|
| Yohimbine                       | 20                                                            |
| SARMs (Selective Androgen Receptor Modulators) | 10                                                            |
| Hemp derivatives *              | 7                                                             |
| DMAA (1,3-dimethylamylamine)    | 6                                                             |
| Ephedra                         | 5                                                             |
| Medicinal ingredients, L-threonate | 3                                                             |
| Hupercine, Vitamin B12 *, Caffeine | 2                                                             |
| Piperine, Phenylethylamine, Beta-alanine, Hydrastis canadensis L. (orangeroot), Folic acid *, Coenzyme Q10 *, Heavy metals, Vitamin E *, 5-HTP (5-hydroxytryptophan), Ethylene oxide, Melatonin *, Methyl synephrine, Mucuna pruriens *, Synephrine, Mixed composition of botanicals, DMAE (Dimethylethanolamine) | 1                                                             |

* Items in italics simultaneously identified as potentially most frequently non-conforming upon the basis of the national register.

4. Discussion

The received results indicate that the ingredients which may be legally applied both in dietary supplements and medicinal substances (borderline ingredients) are frequently questioned in the process of notification; nevertheless, one ought to take into consideration that the reason for granting them the status of non-conforming products in the national register may be of a different kind. This non-conformity may result from too large of a dose of an ingredient, improper chemical form, health claims on a label that are not permitted, or formal errors in the notification submissions such as the lack of a signature of a person authorised to submit a notification. A large part of the selected borderline
ingredients are popular and well-known vitamins and minerals, and also substances such as activated carbon melatonin.

The leading ingredients among those questioned single-ingredient products were vitamin D and also hemp derivatives which seem to be compatible with a lot of interest in these ingredients among consumers [21–24]. Both of the ingredients differ, nevertheless, in the aspect of the type of entities launching them. Whereas vitamin D in more than 10% of cases was offered by entities in the MIMP, hemp derivatives were applied exclusively by producers, not on the list of the MIMP. Interestingly, entities active simultaneously in the pharmaceutical product market launched exclusively supplements vitamins and minerals apart from carbon and fish oils. This group of ingredients is regulated relatively, not ambiguously, within the scope of the maximum permitted doses in dietary supplements. That would confirm the hypothesis that entities in the MIMP, being ex definitione acquainted with the industry-specific requirements and regulations, do not participate to a higher degree in trading substances to which few regulations apply in the aspect of the food law. Non-conformities and doubts were identified in the case of single-ingredient products distributed by this group of entities concerned, in most cases exclusively vitamin D.

The assessment of the conformity of notified submissions of the same entities gives rise to doubts about the degree to which a legislative procedure is applied to products in relation to which preliminary proceedings were initiated. Granting by a food safety authority of the status of potential non-conformity, in more than 16% of cases finished with repeated submission by this same entity, and presumably, the same product was submitted to be registered. That means that there is a sui generis interruption of a product lifecycle set forth in the regulation. The identified phenomenon leads to the situation in which the register contains the same product entered at least two times. Taking into consideration the scope of data provided for the national register and also the fact that central, regional, and local bodies of food supervision communicate exclusively in writing in the relevant scope (there is no central integrated register accessible to offices), it is possible that an entrepreneur launching a product, which was later questioned, recommences a submission procedure rather than disperses doubts by means of conducting appropriate additional research and submitting a declaration, etc., which may cause problems within the scope of identifying a product included in the preliminary proceeding while conducting control activities by local food supervision authorities. The possibility of abuse on the part of producers would be possible to reduce if a system permitted exchanging information on suspicious practices giving rise to concern effectively [25].

The phenomenon described herein also reveals, to a certain degree, factors rendering given products more risky as well as similar practices applied by various entities. We found that activities consisting of the repeated registration of the same product are resorted to by a relatively small number of producers—namely exclusively 5% of the researched companies. Nevertheless, it matters that this phenomenon was identified and described exclusively upon the basis of submitting single-ingredient products, which exclusively constitute more than 17% of all submissions in the analysed period. Regardless of limiting the sample to a specific group of products, we observed that repeated registration seems to depend upon the form of a dietary supplement. Moreover, it was two times more frequently seen in the case of capsules than pills. Powders and liquids were repeatedly submitted more frequently than pills, and this seems to be justified by the complexity of the technological process applied to the particular form and in the context of costs. The production of capsules and powders requires much less expense for investment within the scope of machines than that of pills [26]. Formulation rules are also simpler as [27]. The logical result is less serious consequences of, for instance, wrongly chosen proportions of ingredients, additional substances, and production parameters product; for instance, no lids are applied, and there are no broader problems with the compressed mass of which pills are made. Apart from the form of a product, it is worth indicating that the problem of repeated registration affects vitamins and minerals, excessively applied as supplements
by the researched groups of the Polish population [28], and even though vitamins in the form of dietary supplements ought to be safer than their counterparts in medicinal products applied for particular therapeutic purposes it is disturbing that the phenomena described herein by us are seen as well in the case of ingredients with a high potential of negative effects, such as vitamins A, E, and D [29].

Another factor in which case certain trends can be seen is the time after a product is resubmitted. Most of such steps were taken after, on average, approximately 50–150 days. This is an interesting result in the context of the audit of the Supreme Audit Office (SAO) in 2017, in which a long (exceeding 455 days) average time of processing submission notifications [30,31]. The result found in our research might prove that the reaction time of the CSI was reduced a lot.

What differs from the time periods described herein is what was seen in the case of submissions relevant to active carbon, in which case repeated notification was made no sooner than 130 days after the first submissions. It is worth emphasising that in the light of Commission Regulation (EU) No 432/2012 of 16th May 2012, establishing a list of permitted health claims made on foods [32], also applicable to dietary supplements, consuming active carbon in the daily dose of 1 g helps to reduce excessive stomach bloating after a meal. Simultaneously, a medicinal product containing active carbon (in the dose of 200 mg) is registered, which illustrates the reality of borderline ingredients well.

The market presence of borderline products non-conforming to the food law requirements or violating the pharmaceutical law, contrary to the hypothesis formulated at the beginning of this article, was confirmed in the entries into the RASFF. The conducted analysis permitted identifying a dozen or so submissions relevant to seven ingredients found by us to be borderline. It may mean that, regardless of the simple and cost-free procedure of notification, entrepreneurs fail to comply with the duty of submitting the notification of trading in dietary supplements. Such a hypothesis is backed up by the presence of a large number of submissions in the RASFF relevant to the presence of yohimbine, regardless of a noticeable fall in notification submissions for products containing it observed since the beginning of 2019 [11]. Under the RASFF, it was also found that there are typically medicinal substances that cannot be entered into a notification form. That refers to substances referred to as “SARMs”, which are a class of anabolic agents. The presence of such products in supplements is a problem known and monitored (to a substantial degree) [33]. This issue is beyond the scope of our research.

The presence in Poland of the register of dietary supplements, which was the basis for our research, provides broad possibilities for analysing trends and phenomena. As was shown by research, this tool has a lot of potentials and may be widely applied if developed by various participants such as state and scientific institutions and businesses [34].

5. Conclusions

As a result of the analyses, the following relationships were formulated:

1. Member States’ regulations (at the level of national law) may be unable to monitor borderline products effectively. It is recommended to use regulations at the level of the EU;
2. The repeated notification of the same product is most frequent among pharmaceutical products that do not require highly specialised equipment and technology to be produced—liquids, powders, and capsules;
3. Repeated submission is most frequently seen within the first 50–100 days—thematic control of the SCSI ought to, therefore, be conducted right then;
4. Producers from the same drug producers registering dietary supplements containing borderline ingredients, nevertheless, were not found to resort to “comeback” in relation to borderline ingredients;
5. Partial automatising of the national register has reduced the processing time of notifications by the CSI. Its further development is recommended to strengthen supervision over public health. It is advisable to regulate legal matters of striking out the withdrawn/recalled products of the national register;
6. Research into multi-ingredient products ought to be continued.

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**Conflicts of Interest:** The authors declare no conflict of interest.

### Appendix A

**Table A1.** Re-notifications of notifications of potentially the same products.

| Active Ingredient | Case Number | Date                 | Product Name                  | Form            | Product Category | Company Number | Status      | The Number of Days Between the First and the Next Notification |
|-------------------|-------------|----------------------|-------------------------------|-----------------|------------------|----------------|------------|--------------------------------------------------------------|
| Melatonin         | 1           | 26th February 2021   | Melatonin 3 mg—120 tablets    | tablets         | DS               | 4              | PP         | 206                                                          |
|                   |             | 20th September 2021  | Melatonin 3 mg—240 tablets    | tablets         | DS               | 4              |            |                                                               |
|                   | 2           | 19th February 2020   | Melatonin Forte+              | tablets         | DS               | 39             | PA-WITH.   | 258                                                          |
|                   |             | 3rd November 2020    | Melatonin 5 mg                | tablets         | DS               | 39             | PP         |                                                               |
| C. sativa (1)     | 3           | 15th May 2020        | 5% Liquid (drops)             | Liquid          | DS               | 7              | PP         | 664                                                          |
|                   |             | 10th March 2022      | 5% Broad Spectrum hemp oil    | Liquid (drops)  | DS               | 7              |            |                                                               |
|                   | 4           | 15th May 2020        | 10% Liquid (drops)            | Liquid          | DS               | 7              | PP         | 664                                                          |
|                   |             | 10th March 2022      | 10% Broad Spectrum hemp oil   | Liquid (drops)  | DS               | 7              |            |                                                               |
|                   | 5           | 22nd January 2021    | CBD Oil 5%                    | Liquid (drops)  | DS               | 24             | PA         | 80                                                           |
| Date                  | Product Description               | Formulation                | DS | PA/WITH. |
|-----------------------|-----------------------------------|----------------------------|----|----------|
| 12th April 2021       | Hemp Oil Full Spectrum 5% Hemp Oil| Liquid (oil)               | DS | 24       |
| 22nd January 2021     | CBD Oil 10% Liquid                | DS                         | 24 | PA       |
| 12th April 2021       | Hemp Oil Full Spectrum 10% Hemp Oil| Liquid (oil)               | DS | 24       |
| 22nd January 2021     | CBD Oil 15% Liquid                | DS                         | 24 | PA       |
| 12th April 2021       | Hemp Oil Full Spectrum 15% Hemp Oil| Liquid (oil)               | DS | 24       |
| 28th October 2020     | Vitamin D capsules (soft capsules)| DS                         | 1  | PA-WITH. |
| 31st August 2021      | Vitamin D capsules (soft capsules)| DS                         | 1  |          |
| 12th January 2021     | Vitamin D3 10,000 60 caps         | capsules                   | DS | 4        |
| 26th February 2021    | Vitamin D3 5000 IU—100 capsules   | capsules                   | DS | 4        |
| 5th May 2021          | Vitamin D3 5000 IU—200 capsules   | capsules                   | DS | 4        |
| 23rd July 2021        | Vitamin D3 10,000 IU—100 capsules | capsules                   | DS | 4        |
| 13th January 2022     | Vitamin D3—100 capsules           | capsules                   | DS | 4        |
| 23rd December 2021    | Vitamin D3 Liquid (spray)         | DS                         | 5  | PA       |
| 24th February 2022    | Vitamin D3 Liquid (spray)         | DS                         | 5  |          |
| 20th May 2020         | D 100 µg capsules                 | DS                         | 6  | PP       |
| 18th May 2020         | Vitamin D-3 2000 IU capsules      | DS                         | 18 | NTBC     |
| 4th June 2020         | Vitamin D3 2000 IU capsules       | DS                         | 18 |          |
| 2nd June 2021         | Vitamin D3—Highest Potency       | capsules                   | DS | 18       |
| 27th July 2021        | Vitamin D3—Highest Potency       | capsules                   | DS | 18       |
| 12th February 2021    | Liposomal Vitamin D 4000 IU powder (sachets) | FSMP | 21 (MIMP list) | PP |
| 25th March 2021       | Liposomal Vitamin D 4000 IU powder (sachets) | DS | 21 (MIMP list) | PA |
| 5th May 2020          | Vitamin D3 5000 IU capsules       | DS                         | 22 | PP       |
| 27th October 2020     | Vitamin D3 capsules               | DS                         | 22 | NTBC     |
| 22nd July 2020        | Vitamin D in drops                | Liquid (drops)             | DS | 28       |
| 21st September 2020   | Vitamin D in drops                | Liquid (drops)             | DS | 28       |
| Date            | Product Description                                                                 | Location | Code | Price |
|-----------------|-------------------------------------------------------------------------------------|----------|------|-------|
| 28th October 2020 | Vitamin D3 10,000 IU from Lanolin capsules                                            | DS       | 29   | PP    |
| 25th August 2021 | Vitamin D3 10,000 IU, 360 Softgels capsules                                          | DS       | 29   | PP    |
| 30th October 2020 | Vitamin D3 10,000 IU 120 capsules                                                    | DS       | 29   | PP    |
| 25th August 2021 | Vitamin D3 10,000, 120 Softgels capsules                                             | DS       | 29   | PP    |
| 9th June 2021   | Vitamin D3, 5000 IU capsules                                                        | DS       | 30   | PP    |
| 7th July 2021   | Vitamin D3, 5000 IU capsules                                                        | DS       | 30   |       |
| 28th July 2020  | Liquid (drops)                                                                       | IF       | 32   | NMD   |
| 2nd February 2021 | Liquid (drops)                                                                       | DS       | 32   |       |
| 10th April 2020 | Vitamin D3 5000 IU 240 Softgels capsules                                            | DS       | 34   | PP    |
| 21st July 2021  | Vitamin D3 5000 IU 240 VC capsules                                                  | DS       | 34   |       |
| 10th June 2020  | vitamin D3 4000 IU for obese adults capsules                                        | DS       | 40   | PP    |
| 25th May 2021   | vitamin D3 4000 IU for healthy people over 75 years of age capsules                 | DS       | 40   |       |
| 17th March 2020 | Vitamin D-3 5000 IU tablets                                                         | DS       | 42   | PA-WITH. |
| 12th April 2021 | *** VITAMIN D3 5000 IU tablets                                                     | DS       | 42   |       |
| 26th February 2021 | DHEA 50 mg — 50 tablets                                                            | DS       | 4   | NPI   |
| 23th November 2021 | Dehydroepiandrostone—50 tablets                                                     | DS       | 4   |       |
| 27th April 2021 | DHEA 50 mg — 120 capsules                                                          | DS       | 4   | NPI   |
| 23rd July 2021  | DHEA 50 mg — 120 capsules                                                           | DS       | 4   | NPI   |
| 27th April 2021 | DHEA 25 mg — 120 capsules                                                           | DS       | 4   | NPI   |
| 2nd July 2021   | DHEA 25 mg — 30 capsules                                                            | DS       | 4   | NPI   |
| 30th April 2021 | Pine pollen—50 g powder                                                             | DS       | 26   | PA    |
| 14th May 2021   | Pine pollen—50 g powder                                                             | DS       | 26   | PA    |
| 30th April 2021 | Pine pollen—100 g powder                                                            | DS       | 26   | PA    |
| 14th May 2021   | Pine pollen—100 g powder                                                            | DS       | 26   | PA    |
| 15th May 2020   | Selenium 200 mcg—100 tablets                                                        | DS       | 4   | NTBC  |
| 20th December 2021 | Selenium 200 mcg—100 tablets                                                       | DS       | 4   |       |
| 5th November 2020 | Organic Green Tea capsules                                                          | FSMP     | 14   | NTBC  |

**DHEA (2)**

**P. massoniana (3)**

**Selenium**

**C. sinensis (4)**
| Date                | Product Description                                                                 | Formulation | Code | Notes          |
|---------------------|-------------------------------------------------------------------------------------|-------------|------|---------------|
| 18th May 2021       | Organic Green Tea capsules                                                          | DS          | 14   |               |
| 15th February 2022  | Magnesium Citrate capsules 100 mg – 100 mg                                        | DS          | 4    | PA            |
| 5th April 2022      | Magnesium Citrate capsules 100 mg – 100 mg                                        | DS          | 4    |               |
| 18th May 2020       | Magnesium Citrate caps.                                                             | DS          | 18   | NTBC          |
| 4th June 2020       | Magnesium Citrate caps.                                                             | DS          | 18   |               |
| 4th June 2020       | Magnesium Chloride Hexahydrate powder                                               | DS          | 27   | PA            |
| 23rd September 2020 | Magnesium Chloride Hexahydrate powder                                               | DS          | 27   |               |
| 9th August 2021     | Magnesium citrate pure powder                                                       | DS          | 35   | PA            |
| 23rd August 2021    | Magnesium citrate pure powder                                                       | DS          | 35   |               |
| 17th June 2021      | L-DOPA 300 mg Scabies extract capsules                                              | DS          | 37   | PP            |
| 7th March 2022      | L-DOPA 300 mg Scabies extract capsules                                              | DS          | 37   |               |
| 21st February 2020  | Carbon C60 capsules                                                                 | DS          | 16   | PA            |
| 8th February 2021   | Active carbon capsules (vegetarian capsules)                                        | DS          | 16   |               |
| 20th March 2020     | Activated carbon powder (granules)                                                  | DS          | 26   | PA-WITH.      |
| 6th August 2020     | Activated carbon powder                                                             | DS          | 26   | PA-WITH.      |
| 22nd March 2021     | Activated carbon powder                                                             | DS          | 36   | PA-WITH.      |
| 30th July 2021      | Activated carbon 100 g powder                                                       | DS          | 36   | PA            |
| 21st April 2020     | Activated carbon powder                                                             | DS          | 44   | PA-WITH.      |
| 29th October 2020   | Activated carbon powder                                                             | DS          | 44   | PP            |
| 13th April 2021     | Zinc, 50 mg – 100 tablets                                                            | DS          | 30   | PP            |
| 16th August 2021    | Zinc Picolinate, 50 mg capsules (hard capsules)                                      | DS          | 30   | NTBC          |
| 15th April 2020     | Biotin 10,000 mcg tablets                                                            | DS          | 18   | PP            |
| 4th June 2020       | Biotin 10,000 mcg capsules                                                          | DS          | 18   | PP            |
| 18th May 2020       | Biotin capsules                                                                      | DS          | 18   | PP            |
| 30th July 2021      | Biotin capsules                                                                      | DS          | 18   |               |
| 5th March 2020      | Liquid (oil) 3 types of fish oils                                                   | FSMP        | 23   | PA            |

Zinc

| Date                | Product Description                                                                 | Formulation | Code | Notes          |
|---------------------|-------------------------------------------------------------------------------------|-------------|------|---------------|
| 13th April 2021     | Zinc, 50 mg – 100 tablets                                                            | DS          | 30   | PP            |
| 16th August 2021    | Zinc Picolinate, 50 mg capsules (hard capsules)                                      | DS          | 30   | NTBC          |

Biotin

| Date                | Product Description                                                                 | Formulation | Code | Notes          |
|---------------------|-------------------------------------------------------------------------------------|-------------|------|---------------|
| 15th April 2020     | Biotin 10,000 mcg tablets                                                            | DS          | 18   | PP            |
| 4th June 2020       | Biotin 10,000 mcg capsules                                                          | DS          | 18   | PP            |
| 18th May 2020       | Biotin capsules                                                                      | DS          | 18   | PP            |
| 30th July 2021      | Biotin capsules                                                                      | DS          | 18   |               |

Fish oil

| Date                | Product Description                                                                 | Formulation | Code | Notes          |
|---------------------|-------------------------------------------------------------------------------------|-------------|------|---------------|
| 5th March 2020      | Liquid (oil) 3 types of fish oils                                                   | FSMP        | 23   | PA            |

Coal

| Date                | Product Description                                                                 | Formulation | Code | Notes          |
|---------------------|-------------------------------------------------------------------------------------|-------------|------|---------------|
| 20th March 2020     | Activated carbon powder (granules)                                                  | DS          | 26   | PA-WITH.      |
| 6th August 2020     | Activated carbon powder                                                             | DS          | 26   | PA-WITH.      |
| 22nd March 2021     | Activated carbon powder                                                             | DS          | 36   | PA-WITH.      |
| 30th July 2021      | Activated carbon 100 g powder                                                       | DS          | 36   | PA            |
| 21st April 2020     | Activated carbon powder                                                             | DS          | 44   | PA-WITH.      |
| 29th October 2020   | Activated carbon powder                                                             | DS          | 44   | PP            |

M. pruriens

| Date                | Product Description                                                                 | Formulation | Code | Notes          |
|---------------------|-------------------------------------------------------------------------------------|-------------|------|---------------|
| 17th June 2021      | L-DOPA 300 mg Scabies extract capsules                                              | DS          | 37   | PP            |
| 7th March 2022      | L-DOPA 300 mg Scabies extract capsules                                              | DS          | 37   |               |
| 21st February 2020  | Carbon C60 capsules                                                                 | DS          | 16   | PA            |
| 8th February 2021   | Active carbon capsules (vegetarian capsules)                                        | DS          | 16   |               |

Biotin

| Date                | Product Description                                                                 | Formulation | Code | Notes          |
|---------------------|-------------------------------------------------------------------------------------|-------------|------|---------------|
| 15th April 2020     | Biotin 10,000 mcg tablets                                                            | DS          | 18   | PP            |
| 4th June 2020       | Biotin 10,000 mcg capsules                                                          | DS          | 18   | PP            |
| 18th May 2020       | Biotin capsules                                                                      | DS          | 18   | PP            |
| 30th July 2021      | Biotin capsules                                                                      | DS          | 18   |               |

Fish oil

| Date                | Product Description                                                                 | Formulation | Code | Notes          |
|---------------------|-------------------------------------------------------------------------------------|-------------|------|---------------|
| 5th March 2020      | Liquid (oil) 3 types of fish oils                                                   | FSMP        | 23   | PA            |

Fish oil

| Date                | Product Description                                                                 | Formulation | Code | Notes          |
|---------------------|-------------------------------------------------------------------------------------|-------------|------|---------------|
| 5th March 2020      | Liquid (oil) 3 types of fish oils                                                   | FSMP        | 23   | PA            |

Zinc

| Date                | Product Description                                                                 | Formulation | Code | Notes          |
|---------------------|-------------------------------------------------------------------------------------|-------------|------|---------------|
| 13th April 2021     | Zinc, 50 mg – 100 tablets                                                            | DS          | 30   | PP            |
| 16th August 2021    | Zinc Picolinate, 50 mg capsules (hard capsules)                                      | DS          | 30   | NTBC          |
| Product                  | Date               | Description                                      | Unit(s)          | Strength | Quantity | Code |
|-------------------------|--------------------|--------------------------------------------------|------------------|----------|----------|------|
| Creatine Liquid (oil)   | 18th May 2020      | Liquid (oil) FSMP 23 PP                          |                  |          |          | 686  |
| Creatine powder          | 4th April 2022     | Powder DS 10 PA                                  |                  |          |          | 46   |
| Creatine capsules        | 29th December 2021 | Capsules DS 42 NTBC                              |                  |          |          | 47   |
| Creatine capsules        | 14th February 2022 | Capsules DS 42                                  |                  |          |          |      |
| B12 Hydroxocobalamin 500 µg tablets | 16th March 2021 | 20 PA-WITH.                                     |                  |          |          | 180  |
| B12 Hydroxocobalamin    | 29th January 2021  | Tablets DS 38 PA-WITH.                          |                  |          |          | 164  |
| Vitamin B12 capsules     | 23rd April 2020    | Vit B12 900 mcg (hard capsules) DS 25 PP         |                  |          |          | 382  |
| Vitamin B12 capsules     | 10th May 2021      | Vit B12 950 µg (hard capsules) DS 25             |                  |          |          |      |
| Vitamin B12 with strawberry flavor | 8th June 2020 | Tablets (lozenges) DS 31 PA-WITH.                |                  |          |          | 38   |
| Vitamin B12 with strawberry flavor | 16th July 2020 | Tablets (lozenges) DS 31 PA-WITH.                |                  |          |          |      |
| Vitamin E 400 iu 90 capsules (soft capsules) | 28th July 2021 | Capsules DS 8 PA                                |                  |          |          | 134  |
| Vitamin E 400 IU 90 capsules (soft capsules) | 9th December 2021 | Capsules DS 8 PA                                |                  |          |          |      |
| Vitamin E-400 With Mixed Tocopherols 100 Softgels | 23rd February 2021 | Capsules DS 18 PA                               |                  |          |          | 3    |
| Vitamin E Mixed Tocopherols 100 Softgels | 26th February 2021 | Capsules DS 18 PA                               |                  |          |          |      |
| Vitamin E-400 With Mixed Tocopherols 250 Softgels | 23rd February 2021 | Capsules DS 18 PA                               |                  |          |          | 3    |
| Vitamin E Mixed Tocopherols 250 Softgels | 26th February 2021 | Capsules DS 18 PA                               |                  |          |          |      |
| Vitamin K2 MK-7 200MCG 250TAB | 22nd January 2021 | Tablets DS 15 NTBC                              |                  |          |          | 276  |
| Vitamin K2 HIGH STRENGTH VITAMIN K2 MK-7 200MCG 250KAPS | 25th October 2021 | Capsules DS 15 NTBC                              |                  |          |          |      |
| Vitamin K2 MK-7 200MCG 100TAB | 22nd January 2021 | Tablets DS 15 NTBC                              |                  |          |          | 276  |
| Date       | Description | Strength | Form | Dilution | Brand          | Code |
|------------|-------------|----------|------|----------|----------------|------|
| 25th October 2021 | Vitamin K2 MK-7 200MCG 100KAPS | ****** HIGH STRENGTH VITAMIN ** | capsules | DS         | 15              |      |
| 29th April 2020 | Vitamin A 1000iu 250tab | ****** Vitamin ** | tablets | DS         | 15 PP           | 285  |
| 8th February 2021 | Vitamin A 250TAB | ****** VITAMINA ** | tablets | DS         | 15              |      |
| 31st March 2020 | HempOil 500 mg 5% RAW OIL | 5% RAW OIL HempOil 500 mg CBD + CBDa | Liquid (oil) | DS         | 9 PA-WITH.      | 93   |
| 2nd July 2020 | HempOil 500 mg 5% RAW OIL | 5% RAW OIL HempOil 500 mg CBD + CBDa | Liquid (oil) | DS         | 9 PP            |      |
| 31st March 2020 | HempOil 1000 mg 10% RAW OIL | 10% RAW OIL HempOil 1000 mg CBD + CBDa | Liquid (oil) | DS         | 9 PA-WITH.      | 93   |
| 2nd July 2020 | HempOil 1000 mg 10% RAW OIL | 10% RAW OIL HempOil 1000 mg CBD + CBDa | Liquid (oil) | DS         | 9 PP            |      |
| 31st March 2020 | HempOil 1500 mg 15% RAW OIL | 15% RAW OIL HempOil 1500 mg CBD + CBDa | Liquid (oil) | DS         | 9 PA-WITH.      | 93   |
| 2nd July 2020 | HempOil 1500 mg 15% RAW OIL | 15% RAW OIL HempOil 1500 mg CBD + CBDa | Liquid (oil) | DS         | 9 PP            |      |
| 31st March 2020 | HempOil 3000 mg 30% RAW OIL | 30% RAW OIL HempOil 3000 mg CBD + CBDa | Liquid (oil) | DS         | 9 PA-WITH.      | 93   |
| 2nd July 2020 | HempOil 3000 mg 30% RAW OIL | 30% RAW OIL HempOil 3000 mg CBD + CBDa | Liquid (oil) | DS         | 9 PP            |      |
| 21st June 2021 | CBD Oil 5%, 500 mg, Full spectrum | CBD Oil 5%, 500 mg, Full spectrum | Liquid (drops) | DS         | 2 PA            | 72   |
| 1st September 2021 | CBD Oil 5%, 500 mg, Full spectrum | CBD Oil 5%, 500 mg, Full spectrum | Liquid (drops) | DS         | 2               |      |
| 21st June 2021 | CBD Oil 10%, 1000 mg, Full spectrum | CBD Oil 10%, 1000 mg, Full spectrum | Liquid (drops) | DS         | 2 PA            | 72   |
| 1st September 2021 | CBD Oil 10%, 1000 mg, Full spectrum | CBD Oil 10%, 1000 mg, Full spectrum | Liquid (drops) | DS         | 2               |      |
| 17th August 2021 | CBD Oil 15%, 1500 mg, Full spectrum | CBD Oil 15%, 1500 mg, Full spectrum | Liquid (drops) | DS         | 2 PA            | 15   |
| 1st September 2021 | CBD Oil 15%, 1500 mg, Full spectrum | CBD Oil 15%, 1500 mg, Full spectrum | Liquid (drops) | DS         | 2               |      |
| 2nd September 2021 | CBD oil 500 mg, concentration 5% | CBD oil 500 mg, concentration 5% | Liquid (oil) | DS         | 17 PP           | 145  |
| 25th January 2022 | CBD oil 500 mg, concentration 5% | CBD oil 500 mg, concentration 5% | Liquid (oil) | DS         | 17              |      |
| 2nd September 2021 | CBD oil 1000 mg, concentration 10% | CBD oil 1000 mg, concentration 10% | Liquid (oil) | DS         | 17 PP           | 145  |
| 25th January 2022 | CBD oil 1000 mg, concentration 10% | CBD oil 1000 mg, concentration 10% | Liquid (oil) | DS         | 17              |      |
| 2nd September 2021 | CBD oil 2000 mg, concentration 20% | CBD oil 2000 mg, concentration 20% | Liquid (oil) | DS         | 17 PP           | 145  |
| 25th January 2022 | CBD oil 2000 mg, concentration 20% | CBD oil 2000 mg, concentration 20% | Liquid (oil) | DS         | 17              |      |
| 6th December 2021 | MSM ORGANIC SULFUR | MSM ORGANIC SULFUR | powder | DS         | 11 NTBC        | 108  |
| Date              | Product Description                          | Form    | DS | PA  |
|-------------------|---------------------------------------------|---------|----|-----|
| 24th March 2022   | MSM ORGANIC SULFUR powder                  |         |    |     |
| 30th April 2021   | Reishi tablets                              |         |    |     |
| 29th September 2021 | Reishi tablets                              |         |    |     |
| 30th April 2021   | REISHI powder—50 g powder                  |         |    |     |
| 29th September 2021 | REISHI powder—50 g powder              |         |    |     |
| 30th April 2021   | REISHI powder—100 g powder                 |         |    |     |
| 29th September 2021 | REISHI powder—100 g powder             |         |    |     |
| 10th November 2021 | Oil 10% hemp macerate Liquid (oil)         |         |    |     |
| 15th December 2021 | phytocannabinoids macerate                |         |    |     |
| 10th November 2021 | Macerate Oil 15% hemp macerate Liquid (oil)|         |    |     |
| 15th December 2021 | Macerate of 15% phytocannabinoids Liquid (oil)| |    |     |
| 14th April 2021   | ** Premium Hemp Oil Decarbo 5% Liquid (drops)| |    |     |
| 26th April 2021   | ******** Premium Hemp Oil Decarbo 5% Liquid (drops)| |    |     |
| 25th August 2020  | ******** * WPC 82 powder                   | FSMP    | 43 | NMD |
| 28th December 2020 | ********* powder                            | FSMP    | 43 |     |
| 12th May 2020     | ******** * WPC 82 powder                   |         | 19 | PA  |
| 19th August 2020  | ********* WPC 82 powder                    |         | 19 | PA  |

DS—Dietary Supplement; FSMP—Food for Special Medical Purposes; IF—Infant Foods; PP—Proceedings Underway; PA—The procedure was abandoned, the company withdrew from placing on the market; NTBC—The notification needs to be completed; NMD—Does not meet the definition or requirements for the proposed qualification; NPI—Contains Not Permitted Ingredient. (1) Cannabis sativa L. (Cannabis sativa), (2) dehydroepiandrosterone (DHEA), (3) Pinus Massoniana Lamb. (Masson’s Pine), (4) Camellia sinensis (L.) Kuntze (Chinese Tea), (5) Mucuna pruriens (L.) DC. (Scabies), (6) methylsulfonylmethane (MSM), (7) Ganoderma Lucidum (Curtis) P. Karst. (Yellowish lacquer). * The names of products and entrepreneurs have been anonymised using the symbols “*”.

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