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SUSPENSION OF CONSIDERATION OF 5. NO. 1554

Senator Drilon. Mr. President, the sponsor has requested that the consideration of Senate Bill No. 1554 be suspended in the meantime and that the period of interpellations take place at some subsequent session to enable him to prepare for this very important bill.

Having said that, Mr. President, I therefore move that we suspend consideration of Senate Bill No. 1554.

The President. Is there any objection? [Silence] There being none, the motion is approved.

SUSPENSION OF SESSION

Senator Drilon. I move that we suspend the session for one minute, Mr. President.

The President. Is there any objection? [Silence] There being none, the session is suspended for one minute.

It was 4:22 p.m.

RESUMPTION OF SESSION

At 4:23 p.m., the session was resumed.

The President. The session is resumed.

BILL ON SECOND READING 5. No. 1545 - The Philippine Micronutrient Fortification of Processed Food Act (Continuation)

Senator Drilon. Mr. President, I move that we resume consideration of Senate Bill No. 1545 as reported out under Committee Report No. 37.

The President. Is there any objection? [51lence] There being none, resumption of consideration of Senate Bill No. 1545 is now in order.

Senator Drilon. Mr. President, we are still in the period of interpellations. I ask that Senator Flavier, the principal sponsor of the measure, be recognized.

The President. Senator Flavier, the principal sponsor of the bill, is hereby recognized.

Senator Drilon. Senator Guingona wishes to raise questions on the Floor.

Senator Flavier. Actually, Mr. President, the one who made reservations was Senator Magsaysay, but apparently he has some

liquidity problems and therefore is not in the Hall. But if Senator Guingona would like to continue to ask a few more questions, we could go to VFA--vitamins for all.

SUSPENSION OF SESSION

Senator Drilon. Mr. President, I move that we suspend the session to allow Senator Magsaysay to come into the Hall.

The President. The session is suspended for one minute, if there is no objection. [There was none.]

It was 4:26 p.m.

RESUMPTION OF THE SESSION

AT 4:27 p.m., the session was resumed.

The President. The session is resumed.

The Majority Leader is recognized.

Senator Drilon. Mr. President, the Minority Leader was supposed to take the Floor to ask questions of the sponsor, but he has withdrawn his reservation and has given way to Senator Magsaysay. May I request that Senator Magsaysay be recognized.

The Fresident. Senator Magsaysay is recognized.

Senator Magsaysay. Thank you, Mr. President. May I congratulate the Senator from the Cordilleras and Tondo for safeguarding the health of the Filipino people—from tobacco smoking down to micronutrients. We can see that the map of the Senator is in the right direction—that is for a healthier, stronger, taller, faster and more modern physique of the Filipino people.

To cut the VS, Mr. President, may we ask a couple of questions of the dear Senator on how the process of fortifying rice, flour, sugar and cooking oil will be done?

I understand that Thailand is one of the most prolific countries which exports rice, one hundred percent white, first-class, quality rice. It does not say whether it is fortified or not. May I know if the Thai rice exported to the U.S. and other countries, including the Philippines, is fortified?

Senator Flavier. Mr. President, that is a relevant question. All rice imported into the Philippines are nonfortified. Therefore, in this legislation, they will be required to do so. Fortunately, the system is manageable because what will happen is we will introduce what is called as "premix", meaning a handful of rice will be fortified with the ingredient. This handful of fortified rice will then be mixed to a larger bulk. That would be the fortified rice ready for

consumption by Filipinos.

Senator Magsaysay. Would this be involving a double handling of the rice and in turn will increase the price? Because when the rice is remixed with a handful of fortified rice, the bulk rice is exposed into the atmosphere which might get mixed up with some polluted air because of double handling.

Senator Flavier. Yes, Mr. President, that is theoretically correct but not a warranted fear. In fact, we already had experience in doing this but limited to the 10 percent to 15 percent of rice are imported through the NFA, and fortunately, we did not encounter such difficulties.

Senator Magsaysay. Thank you, Mr. President. The other question here is: What about the other micronutrients like vitamin Boomplex and even the one that builds up our bones?

Senator Flavier. Is it calcium?

Senator Mageayeay. Not calcium. The one that is put in water--flouride.

Senator Flavier. Yes, flouride for the teeth, Mr. President?

Senator Magsaysay. Yes, Mr. President.

Senator Flavier. Actually, we are zeroing in on two parts. First, is the so-called "voluntary". The different business groups can put in as much of the nutrients as the would like to promote their sales.

Second is the so-called "mandatory". It is limited to the four staple foods. And these four are: rice, sugar, wheat and cooking oil. Having said that, the question of the gentleman, is how about the other nutrients? Let me answer the gentleman 'this way, Mr. President.

As part of the bill, there will be a group that will be mandated to review this need from time to time. And where warranted, they will then decide to include this to what would be fortified. On the gentleman's point about the vitamin Bl, this is no longer as much a problem as it used to be during the 1950s, when Dr. Juan Salcedo, who was once upon a time the Secretary of Health of the Philippine government, got into the Bataan experiment where he fortified the Philippine rice with Vitamin Bl or thiamine. To the best of my knowledge, that is no longer a major problem in the Philippines today.

Senator Magsaysay. I understand, Mr. President, that the bran from rice has a lot of nutrients. Yet, when we mill the rice, that same bran is set aside and removed and then we have to spend again to put back the micronutrients. So the bran is wasted.

Senator Flavier. That is a very accurate observation, Mr. President. Actually, part of the program of the Department of Health and our National Nutrition Council is to discourage overmilling. As the gentleman said, when the rice bran is milled out, we are, in effect, removing the source of the thiamine or vitamin Bi.

So, one solution is to encourage people to eat the brown rice or what is known as the "upland rice" because it is rich in vitamin Bl and thiamine. However, for the greater part of the population, by culture, by training, or by habit, the eating of white rice seems to be a premium and white rice, traditionally, is the overmilled rice. So the gentleman is right. We must discourage the overmilling, but failing thus, the other easy solution would be to put in the vitamin Bl into the rice.

Senator Magsaysay. Mr. Fresident, the few times that I had a chance to go to the Asian supermarket in San Francisco, I would see a lot of rice from Thailand, especially "Jasmine rice". And I do not see the rice being mixed with the micronutrients. My point, is, if the very health conscious and very strict American consumers do not mind not having the micronutrients in the rice they buy, including the imported rice, why should we put this practice? Although the practice is laudable, it might change the whole matter of choice or options. Some people might say that we are already taking vitamins and yet, we do not want to be overvitaminized. Of course, vitamins can be just expelled by passing fluid or liquid.

Senator Flavier. That is an important observation, Mr. President, and it is accurate.

However, in the United States, first of all, micronutrient is not a problem anymore, mainly because their foods are already adequately protected or provided with micronutrients. So it is not also a problem, as a general rule, among the developed countries in terms of rice. And that is not to discount the importance of the gentleman's question. Rice is not a staple in the United States. If they want to do that, most likely, it will be with wheat, and wheat is very adequately fortified in the United States, Mr. President.

Senator Magsaysay. Does it mean that wheat is fortified with micronutrients, or wheat itself per se is a nutritious food item?

Senator Flavier. I am not too sure about whether wheat has it in natural form. But I am very sure that it is fortified, I think, artificially through the fortification process. Because almost all the bread in the United States are provided with labels that say "Vitamin B-complex fortified", "Vitamin Bl fortified" and all that. Not only that, they have also a lot of wheat that are milled minimally. Among the health-conscious people, they prefer the kind of wheat that is rich in the germ

and rich in the bran which is the source of vitamin B-complex, Fresident.

Senator Magsaysay. Thank you, Mr. President. Lastly, may I read to the gentleman from the Cordilleras the position of the Philippine Sugar Millers Association. I think he was given a position paper by the Philippine Sugar Millers Association. It says: The Sugar Regulatory Administration accepts fortification of sugar with vitamin A as a safe and cost-effective way to prevent and control vitamin A deficiency.

Now, SRA suggests fortification of refined sugar as the preferred option and practical solution. But its concern is the cost of capital investment to fortify sugar. The SRA calculates that the capital investment needed is PZ million per sugar refinery, or a total of P30 million for the 15 refineries.

May we know the comment of the gentleman from the Cordilleras?

Senator Flavier. Yes, Mr. President, gladly.

If I recall, during the hearing, the Philippine Sugar Millers Association was well-represented and the millers did express their support for fortification. But their concern was that we were silent in terms of the kinds of sugars that would be included. That there was an implication that it. would include all, including the raw sugar. In that light, we responded by saying that we agree with their concern and that because of this, we will not consider all sugars. We will only limit it to the refined sugar, and the raw sugar will not be included.

It is still true that there will be some amount of investments totaling about PI million to PZ million per refinery. And since there are about 15 refineries, the sum would be quite significant.

But when we discussed this in terms of Pl million and PZ million, I got the impression that, provided they are given accommodation for the capital outlay from the financing institutions, like the Land Bank, the Livecor, the DTI and also assistance from the Department of Science and Technology—so that we added this under Section 7—that they would be willing. Therefore, we met half-way in that important point they raised, Mr. President.

Senator Magsaysay. Mr. President, may I ask my last question.

Senator Flavier. Yes, please.

Senator Magsaysay. On the cooking oil which the bill intends to implement the adding of micronutrients, including iron, vitamin A, iodine, thiamine and riboflavin. Would this not be rendered useless when the cooking oil reaches cooking

temperature which is more than the boiling point of the oil? Can the sponsor comment on this--that we are putting all these micronutrients but then when we cook the oil to cook the food, this will become wasted because the vitamins will be burned?

Senator Flavier. That is a good observation, Mr. President. During the hearing, we were informed by the Department of Science and Technology that as far as vitamin A is concerned, it is not lost. But even granting that some of it is lost, I am told that the loss factor is to the tune of about 20% to 30%. Since the needed micronutrients will be covered by even just one-half of the fortification, we will already be on the safe side.

Senator Magsaysay. Lastly, Mr. President. This must be my third last question. This is the final last question.

Senator Flavier. The third last question is welcome.

Senator Mageayeay. May we know who will fund the process of adding micronutrients to these staple foods?

Senator Flavier. Actually, in intent, it was supposed to be the manufacturers. The first reason why we opted for that is that, today, many of them are already doing it because of the fact that by putting micronutrients, they found that their sales have gone up. In other words, it is cost-effective.

However, for the staple, which is a much bigger built--as we all know, more Filipinos eat rice, sugar, bread, and, of course, cooking oil--the amount will be added. As the gentleman has mentioned, for sugar, for example, there will be that one-time investment of Pi million because of the mixing.

As far as the micronutrient itself is concerned, it is a very affordable level. For example, the emerging calculations are that it might increase the cost of our pandesal by one centavo. Probably, for one set of cooking oil, we will add about two centavos to the cost. So, it is an affordable level which, I am sure, the public will be happy to shoulder because of the effects on their health.

Senator Magsaysay. Thank you very much, Mr. President. I appreciate the straightforward replies of the gentleman to my questions and concerns.

Senator Drilon. Mr. Fresident.

The President. The Majority Leader is recognized.

Senator Drilon. Sen. Aquilino $\bar{\mathbf{Q}}$. Pimentel Jr. wishes to be recognized.

The President. Sen. Aquilino Q. Pimentel Jr. is recognized.

Senator Pimentel. Mr. President, will Senator/Attorney Flavier respond to a few questions?

Senator .Flavier. With great pleasure to Dr. Nene Pimentel.

Senator Fimentel. Mr. Fresident, I am coming in from the cold on this issue. These questions are really intended to clarify in my mind just exactly what will be the coverage of this proposal. I am more concerned with the things that really affect the masses of our people. I could understand that the sponsor is including rice and sugar in this process. What about corn? Because a lot of our people in the South are corn-eaters. Is that also included?

Senator Flavier. Yes, Mr. President. That is a good point. In fact, during the hearing, the way it was brought to my attention was, why I was not including the food of Pilita Corrales and Flash Elorde? I think those are important points.

The simple answer, Mr. Fresident, is that on a relative basis, there would be four staple products that would be more widespread in consumption. But if there is a fifth or sixth, it would easily be corn.

Fortunately, corn has already the vitamin A that we are looking for and therefore, we did not include it. But having said that, down the line, if it is found that, say, vitamin A is still a problem, the committee that is overseeing the approval of this proposed bill can recommend that corn be included. But for the yellow corn, I am very sure, this will not be necessary.

Senator Fimentel. Yes, yellow corn for the hogs especially. We do not have to worry about the hogs diet. But kidding aside, Mr. President, I suppose that Senator Flavier was talking about the white corn or the ordinary corn, not the yellow corn.

Nonetheless, I would like to find out, Mr. President, just exactly what process is followed to fortify these basic staple products that the sponsor has mentioned?

Senator Flavier. Yes, Mr. President. There are two types: One is the "premix" concept which is to say we get a handful of the rice and the fortificant is mixed. This then is mixed with a bigger bulk. In other words, it is not done directly for expedience. This is done for both sugar and rice. However, for wheat and oil, it is done directly. I think it is either mixed directly or sprayed directly on the staple.

Senator Pimentel. All right. Let us take a concrete example, Mr. President. There is a rice harvest coming from, let us say, Nueva Ecija. From the farmgate, the rice is sold somewhere, probably through the National Food Authority. Then the National Food Authority becomes the conduit for the buying of this rice by the consumers. Where does the fortification take place?

Senator Flavier. The fortification, Mr. President, occurs at the mill level. That is why fortification, through the NFA, is the easy part because it is a captive system, including the imported rice. The hard part, and that is the reason why we provided for a five-year public education and transition period, would be the smaller millers. There are 15.000 of these millers all over the country that need to be brought into the whole system.

Senator Pimentel. Yes. Among other things, Mr. President, the problem here would be ensuring faithful compliance with this process. I am just wondering how would our monitoring service be regarding this issue. In other words, presume that the millers would be expected to shoulder the cost. Who is going to shoulder the cost? Is it the farmer who will have his rice milled or the miller who will just unhusk the rice and mill it?

Senator Flavier. Yes, both can be done. In the early part, in Fresident, the government will probably be ready to subsidize this by providing the premix as we did some years ago. Later on as the value and importance becomes a way of life, then we can let the free market take place.

The point of the gentleman about monitoring is important. It is my impression that the Eureau of Food and Drugs, which is our usual monitoring agency in the country, the Department of Science and Technology, including the Department of Agriculture and the National Nutrition Council and other agencies, particularly the local government units will come into the picture, and the testing will be done on a random sampling to make sure that fortification has, in fact, been done.

Senator Pimentel. To my mind, this is a matter of making sure that the government will have the ability to determine whether or not the rice being sold in the various outlets actually comply with the requirements of this bill. Because if we are unable to do that, what for do we have to go through this tedious process of making a law that we will not be able to implement?

But nonetheless, the point of the gentleman about mobilizing or impressing into this service of the central government is that the facilities of the local government would really come in handy. The reason I said that is, once upon a time, I was privileged to serve as a mayor of a city in Mindanao, my home City of Cagayan de Oro. Whenever there are problems about hoarding, for example, and only the central government agencies are mobilized, the agencies are bound to fail because more often than not, the national agencies would have very little personnel to actually implement the thrust of a particular law.

In this case, monitoring the compliance by the rice miller-for example, if we talk of the rice millers--as the mechanism for ensuring that the various staples are duly fortified in

accordance with the mandate of this bill should be provided. I think there is no substitute for the use of the facilities of local government in that regard. Therefore, if it is not in the bill of the gentleman, probably at the proper time, he can introduce amendments to that effect.

Senator Flavier. I agree with the gentleman one hundred percent. There is already reference, but I think there is room for improving the phraseology to make sure that we underscore the role of the local government units.

Senator Pimentel. Mr. President, having discussed those points, I would like to inquire further: If the central government is prepared to subsidize, by how much and for how long is the initial implementation of this project envisioned in this bill?

Senator Flavier. My answer is tentative, Mr. Fresident.

Senator Pimentel. Yes, of course.

Senator Flavier. But I am reasonably confident that this can be done because we are now spending about PZUU million yearly to provide vitamins to our people directly by way of supplementation, that is to say, pills and the like. That is not satisfactory because there are many who are missed out. But if we fortify the staple, we will be able to cover all of these.

Ergo, if we have PZOO million for the supplementation, I am almost sure that we can start with a sizable amount of that, and that will be more than enough to start the program and then gradually increase it as the habit becomes more widespread. But it is a tentative answer.

Senator Pimentel. Under what particular department would the gentleman envision this amount to be taken from or to be included in the national budget? Because if we are to make sure that this program will succeed, we will have to provide the money for it.

In the gentleman's opinion, we would like to find out whether he thinks that the appropriation needed for this bill would be sourced out of the funds of the Department of Health or the Department of Agriculture. In other words, what department does the gentleman think would be the best department under which the money requirements will be placed?

Senator Flavier. Mr. President, that is a very good question. Offhand, I started from the proposition that I did not want any additional budgeting because of the current state and also because of my close association with the Chairman of the Ways and Means Committee. I am sure that he would frown upon...

Senator Pimentel. He is nodding his head. The chairman of the gentleman is nodding his head vigorously.

Senator Flavier. Yes, Mr. President, so vigorously that it is almost hitting the desk in front of him. So I am sure that he agrees.

In principle, it is important because sometimes our tendency is to ask money all the time. But here what I am saying is—and I hope I am proven correct because of the fact that I have been with the department—we will use the existing budget of the Department of Health to the tune of F200 million for supplementary vitamins and channel some of it gradually to the fortification program, because there are two types: One is the supplementation where we give directly a pill or a capsule; and fortification is when we apply it in very small quantities to the staple food or to the foods that are sold. So we will just be channeling and because of that, there will be no additional budgeting necessary. That amount is now in the DOH budget.

Senator Pimentel. I thank the gentleman for that answer mr. President.

I have one final point: Every now and then, our country imports rice. As a matter of fact, it seems very unusual if we do not import rice from year to year. So how do we fortify the rice that we import, considering that these are already milled rice ready for distribution?

Senator Flavier. That is a good question, Mr. President. Fortunately, that is the easy part mainly because all imported rice, by virtue of our system, pass through the NFA. The NFA has already the equipment to mix or the mixer is already present and the NFA will be able to do it. The only problem that will need a lot of health education is the 15,000 smaller rice mills in the Philippines. But for the imported rice, because of the NFA route, it is not a problem.

Senator Pimentel. Mr. President, have we inputted the additional expense for the NFA to do this? What additional expense will the NFA incur if it also handles the mixing of nutrients with imported rice?

Senator Flavier. To the best of my impression, it will be mostly the fortificant or the vitamins or the iron that we need to mix. But for the implement, the NFA already have it because this is a simple mixing device that was invented or fabricated by the Department of Science and Technology. Of course, this will depend on the need for additional labor. But my impression is that this will be insignificant.

Senator Fimentel. In any event, we do not have any definite figures yet on the amounts that might be needed for this particular activity on the part of the NFA as far as imported rice is concerned.

Senator Flavier. Not yet. All we know is that 15% of our

rice consumption is generally imported, and that is the part that NFA will be mixing.

Senator Pimentel. For pandesal, I heard the gentleman say that there will be an additional cost of about one centavo, Mr. President.

Senator Flavier. Yes, Mr. President.

Senator Fimentel. What I am worried about is with the micronutrients, our pandesal might also become "micro-pandesal."

Senator Flavier. In fact, that is the trend, Mr. President, and the gentleman is right. But the estimates were based on the "macro-pandesal."

Senator Fimentel. Way I thank the gentleman, Mr. President, for those enlightening thoughts.

Senator Flavier. I would like to have Senator Enrile make the interpellations, Mr. President, because the two others, Sen. Loren Legarda-Leviste and Sen. Gregorio B. Honasan, have intimated to me that since their questions were already covered, they will no longer interpellate. So I would like to accommodate Senator Enrile who will be the last to interpellate.

Senator Drilon. We were about to request the Chair to recognize Senator Enrile.

The President. Sen. Juan Ponce Enrile is recognized.

Senator Enrile. Thank you very much, Mr. President.

Since the distinguished gentleman from the Cordilleras, Tondo and the Philippines has already indicated his willingness to yield for my questions, may I proceed to ask my questions, Mr. President.

Mr. President, at the full implementation of this program, now much money are we talking about? What is the volume of business involved?

Senator Flavier. There are two volumes, Mr. President. One is the voluntary which is now being done. This is done with noodles, with soy sauce, with milk at no expense to the government. In fact, the good news is that it has caught fire to the point where by putting the micronutrient, they are entitled to put a seal of approval by the DOH called the Sangkap Finoy.

And for this, Mr. President, I was very surprised to hear that they are willing to pay. There is a fee they are paying to enable them and, understandably, because they are able to recoup it through sales.

However, for the mandatory which is for staple, Mr.

President, there are two types of expenses. The expense for the capital for the mixers, and we hope that the milling companies will be able to absorb it with our assurance of financial assistance from the Land Bank, the Livecor and other financing institutions.

However, for the nutrient itself, there are two phases, Mr. President. In the beginning, we may have to subsidize this, and as I said in reply to Senator Pimentel, we can source this from the PZOO million that is now being used for supplementation. And then later as the practice becomes acceptable, we hope that even the millers can provide it as it will be cost-effective.

Senator Enrile. So how much will be the annual amount involved in these-first, the equipment, if equipment is needed; second, the nutrients themselves; and third, the service to inject these nutrients into these products?

Senator Flavier. That is a very good question, Mr. President, only because we have not gotten into the very detailed determination of the cost. What we know is that for the micronutrient, we are ready to source it from the P200 million.

Senator Enrile. How much of that P200 million will be eaten up by this program, Mr. President?

Senator Flavier. For the micronutrient, Mr. President--I am now guessing--I would say that depending on the acceleration of the program, we can probably start with one-Iourth. And the implication or the assumption is that the supplementation will still go on--and this I am guessing again--until the whole can be used for the purpose.

The other one is the capital outlay for the mixer, Mr. President, which is estimated at about Pl million or thereabouts for the 15 sugar mills, for the 13 oil mills and for the 13 flour mills and that would be something we expect the millers to absorb. However, we do not have precise figures if we factor in other things like labor and the like.

Senator Enrile. How about the rice millers throughout the country, Mr. President? Are we going to say that we will need also Pl million per rice mill?

Senator Flavier. No, Mr. President. In fact, for them it will be a very simple, very small type of mixer that is very easy to fabricate.

Senator Enrile. What will be the cost of that mixer?

Senator Flavier. I am not very sure, Mr. President. The one presented to me is the model that was developed by the DOST. It is a very small one and the DOST is willing to have it fabricated locally without cost for royalty.

Senator Enrile. Yes. But it will still have a cost of fabrication.

Senator Flavier. Yes, definitely, Mr. President.

Senator Enrile. At PlO,000 per unit, that will mean Pl50 million; at I million units, that will be Pl5 billion. I suppose we are talking in between these two figures.

Senator Flavier. I am ready to accept the gentleman's figure of about Pi0,000 to fabricate it as the high limit. My own guesstimate is from P5,000 to Pi0,000.

Senator Enrile. From P5,000 to P10,000?

Senator Flavier. Yes, Mr. Fresident.

Senator Enrile. Mr. President, how do we distinguish between a fortified and a nonfortified rice?

Senator Flavier. There are laboratory tests that are easy to administer by getting samples and testing them in the laboratory of either the Food and Drug Administration, the Department of Science and Technology, or even in the universities and laboratories of the LGUs.

Senator Enrile. Let us say that an official of the DOH will go to Cubao and take samples of rice displayed for sale in that market. He analyzes it and he finds that in one stall there is no fortification, and in the other stall there is fortification by laboratory analysis. How do we now determine the universal type of rice that must be withdrawn from the market in order to make this law operable?

Senator Flavier. That is a good question, Mr. President. There are several levels that we can use. One is at the level of the millers. For example, if it were a sugar miller--we have 15 of this--it will be very easy to perform the testing. In addition, as the gentleman is referring to, we can also test it at the market site.

Senator Enrile. Am I to understand that the fortification will be done at the time of refining or at the time of the bagging of the refined sugar? At what point in the manufacturing of the refined sugar is the fortification done?

Senator Flavier. Shortly before the bagging, Mr. President.

Senator Enrile. So it is possible that there are sugar that would not be fortified because we cannot identify the sugar whether it is fortified or not. We cannot distinguish a sugar that is fortified from an unfortified sugar.

Senator Flavier. That is correct, Mr. President. Not only

that. If it were rice, we cannot tell the difference.

Senator Enrile. And yet we are going to charge the consumers for the price of a fortified sugar or rice, although the sugar or the rice may not be fortified because we cannot really distinguish one from the other. We do not even require a labeling here. We cannot even identify the manufacturer of the sugar or the rice.

Senator Flavier. We may have to do that, Mr. President. We will require labeling because if they do not do that, there are penalties to be imposed.

The question of the gentleman is: "At what level is the fortification?" And I said, "Before the bagging." What I heard the gentleman say is, maybe it should be in the bigger bulk to ensure....

Senator Enrile. Wr. President, if we are going to require labeling, from the viewpoint of one who is also somewhat involved in manufacturing, I am telling the gentleman that that will add a tremendous cost to the product. If we are going to require labeling whether one centavo per pandesal will be a correct estimate of cost.

Senator Flavier. I realize the difficulty of the costing, Mr. President. But what I hear the gentleman saying is, how do we make sure that our monitoring is effective? Maybe we need to put in a random-sampling concept to make sure that the fortification has been done.

However, I am really in an area that I am not too sure of. These technical factors will be taken up by the bigger technical committee of the fortification which can then set up certain guidelines for the process of fortification and the monitoring to make sure that the staples are adequately fortified, Mr. President.

Senator Enrile. Mr. President, I get the impression that for us to be able to efficiently and effectively administer and enforce this law, we will require a tremendous number of manpower which will add up to the budget of the government. That is why I am raising these questions now, because we will have to monitor daily every rice stall all over the country—from the town of Itbayat in the North which is in the Province of Batanes all the way to the town of Taganak in the South which is near Sandakan. So, how are we going to accomplish this?

Senator Flavier. That is an important point, Mr. President. Let me answer the gentleman in two ways: One, I agree with the gentleman that this is a necessity, and we hope that the DOH and the other agencies of the government can take steps to strengthen them within the realm of realities. However, the suggestion or concern of Senator Pimentel is also very appropriate or timely because the role of the NGOs and the LGUs or local government

units will go a long way in trying to do something about the point of the gentleman in terms of monitoring.

Senator Enrile. I want to assure the gentleman that I am all for this-to help the people maintain a healthy condition. But what I am really trying to caution the Senate about is the possibility that we may be enacting a law that will not be effectively or efficiently enforced, in which case, it will redound to the effectiveness of our legislative-making body. Nevertheless, I will go on to some other questions.

Mr. President, we have a practice in this country—and this is particularly true in our region of the country in the North—where farmers grow rice and keep a portion of their harvest for themselves. I think this is true in many parts of the land. They only mill and sell such portion of their harvests which, to them are not needed for their own consumption.

Therefore, the people who will benefit out of this fortification law would be the buyers of the harvest available for the market. But the retention of the farmers will be consumed by the farmers, and so they will not benefit out of the thrust of this law. What can the gentleman say about this. Mr. President?

Senator Flavier. I am almost tempted to suspect that the gentleman was once upon a time a farmer, Mr. President, because the practice is true. They have this farm that they till and then a portion of the harvest is kept in their own kamalig for family consumption.

Senator Enrile. In their own sarusar.

Senator Flavier. Yes, Mr. President. This portion is not within the purview of the program. Fortunately, at least for certain vitamins, especially thiamine, this is also not the problem because of the peculiar system of husking, the way they pound it. It is really the cover that is removed and the brownish thins remain. In that sense, it is good.

However, since the gentleman's point is very well-taken in terms of the noncoverage, at least, in intention, when we were planning this out from the very beginning, there would be ideally a form of public health education so that later they would be motivated to buy very small packets of premix. These are a few grains of rice already fortified which they can mix with the rice that they have in their homes. But this will take longer if the normal market is given five years, for purposes of this home consumption. I suspect that will be longer.

Senator Enrile. Mr. President, would there be any change in the taste of the food that will be fortified?

Senator Flavier. Fortunately, Mr. President, all the experimental results that were given to us did not change the

taste, did not change the color, did not change the smell and did not change the appearance, that is why it is a good system.

Senator Enrile. Therefore, if the government is inefficient in monitoring the thrust of this law, the consumers will never know that the rice, the sugar, the salt that they are taking or the corn that they are eating, for those eaters of corn bits, are indeed fortified?

Senator Flavier. The gentleman is correct, Mr. President. That is the trade-off and, therefore, accentuates the gentleman's point about the need for tightening the monitoring system.

Senator Enrile. And yet, this law will then justify the sellers, the dispensers of these products to charge a higher price per capita for the products which will increase their profitability, their bottom line, but that increased profitability will not have any corresponding benefit to the public.

Senator Flavier. Accepting the gentleman's assumption, the answer is yes, Mr. President, and therefore, underscores the double importance of his point about proper and effective monitoring.

Senator Enrile. Mr. President, again, I will bring the gentleman back to our area of the country. There are portions of our region where the people do not eat rice, do not eat corn, but they eat root crops. They eat kamote, they eat ube. These are not going to be benefited by this law.

Senator Flavier. That is another correct observation, Mr. President. Fortunately, maybe because of nature's design, these particular kinds of foods are already high in vitamins and minerals. Especially the root crops, I think, in part because of the way they are grown, they absorb the minerals and the nutriments from the soil.

Senator Enrile. In Mindanao, for instance, there are people who eat cassava or kamoteng-kahoy, instead of rice or corn bits. But as the distinguished gentleman from the North and from Tondo said, these root crops are already fortified in themselves because of their rich nutrients or rather amount of micronutrients naturally taken from the soil.

Senator Flavier. That is correct, Mr. President. In Mt. Province, even vitamin A is not a problem because the kamote that the people eat has adequate amount of vitamin A. What they do lack, however, is iodine mainly because these are foods accessed from seafoods, and also because of the leaching of the soil, most of the iodine from the rain have already been washed away. So for these areas, we have gone into supplementation.

But on the gentleman's point, it is covered fortunately by natural sources.

Senator Enrile. Now, Mr. President, just an aside, a little bit of digression. Can we really distinguish an iodized salt from a noniodized salt?

Senator Flavier. Again, Mr. President, from the appearance, to the best of my knowledge, we cannot distinguish. However, we have a fighting chance with the salt because there is a very quick test that can be done on sight. We can put it on the salt itself, and it is a mixture of starch. This is the kit that was passed on by the Department of Health. Anybody. In fact, they are now teaching schoolchildren. Because when we put a drop of this solution on the salt, the color will become bluish or violetish, and the change in color is a sign that there is iodine. If there is no change in color, that means iodine is not present.

Senator Enrile. I thank the gentleman for that education, Mr. President.

Now, rice is supposed to be mandatorily fortified with iron. Why iron and not vitamin B or vitamin A?

Senator Flavier. Yes, Mr. President, mainly because it is the overwhelming problem in the country. For example, the WHO says that when the incidence of iron is at the level of 15 percent, it is bad. Firstly, ours is about double that—30 percent or 35.1 percent. Secondly, it has also been found out that the preschoolers, the one-year-old children, lactating and pregnant women—50 percent of them—are, by and large, anemic, meaning they are iron deficient, and that is why it is a very serious problem for us.

For those who are in school, it goes as high as about 35 percent and thereabouts. But the 50 percent for the 1-year-old children and the lactating women, who need it most because of the baby, and also the pregnant women is a very serious problem in the country. Ergo, we want to fortify rice with iron, Mr. President.

Senator Enrile. Are there no contraindication that will arise, Mr. President, if one eats too much food with iron? For instance, if one is suffering--I am not a doctor but I have learned this from others--Irom some kind of hyperacidity or ulceration, which is common among people who are precisely in the condition that the gentleman mentioned, iron supposedly is bad for him.

Senator Flavier. Yes, Mr. President, the point of the gentleman is well-taken on the second. Sometimes, when one has ulcer, those who are extra careful do not recommend it because of the irritating effect of the iron. For example, when one is new in a certain area and drink the water, when the level of iron and magnesium is high, one gets diarrhea.

However, I will be very honest with the gentleman. When I first ventured on this fortification, one of the strongest criticisms was that we were going to create a lot of vitamin and iron-poisoning or overdosage. The good news is that in the several years we have done it, there is not a single case of poisoning. The reason, I think, is, the level of poison is fairly high. It will be at least four or five times the level of what we want to give and the daily recommended dietary allowance is far below that of poisoning.

Senator Enrile. Mr. President, I was struck by the fact that for hard wheat flour, we have to fortify it with vitamin A as well as refined sugar and cooking oil. But there is no mention about vitamin B and the other vitamins. What is the special need for vitamin A?

Senator Flavier. Again, Mr. President, first, because there is a fairly high incidence of avitaminosis in the country, meaning, shortage of vitamin A.

Senator Enrile. What are the indications of avitaminosis, Mr. Fresident?

Senator Flavier. First of all, it is in the eyes. It causes blindness because of the fact that one's nightsight is impaired. For children below five years old, the level in the Philippines is about 3.5 million children. According to studies, the presence of vitamin A has decreased the incidence of infection because vitamin A is important for the lining of the body. That is why some people take it for their skin, they take it for their respiratory system, and the like.

Senator Enrile. Thank you very much, Mr. President. I raised these questions just to put them into the Record so that we will take note of them. I am quite happy I was made a coauthor of this measure. I will support the measure and, hopefully, it will serve the needs of our people.

Senator Flavier. I would like to thank the gentleman for those excellent questions, Mr. President. I am very relieved because I thought he was going to ask me about the constitutionality of vitamin A. Thank you very much.

As I manifested, Sen. Loren Legarda-Leviste and Sen. Gregorio B. Honasan, who have earlier made reservations to interpellate, have already withdrawn said reservations. They told me that the questions they wanted to ask me have already been asked by the earlier seven interpellators. So it is finished. Consummatum est. So the VFA or vitamins for all is now ready for the period amendments. [Laughter]

Senator Drilon. Mr. President, I move that we close the period of interpellations on Senate Bill No. 1545 under Committee Report No. 37.

The President. Is there any objection? [Silence] There being none, the motion is approved.

SUSPENSION OF CONSIDERATION OF S. NO. 1545

Senator Drilon. Mr. President, I move that we suspend consideration of Senate Bill No. 1545 under Committee Report No. 37.

The President. Is there any objection? [Silence] There being none, the motion is approved.

BILL ON SECOND READING 5. No. 1438--Early Childhood Care & Development (Continuation)

Senator Drilon.. Mr. President, I move that we resume consideration of Senate Bill No. 1438 as reported out under Committee Report No. 22.

The President. Is there any objection? [Silence] There being none, resumption of consideration of Senate Bill No. 1438 is now in order.

Senator Drilon. Mr. President, we are still in the period of interpellations. May I ask the Chair to recognize the principal sponsor, the Chairman of the Committee on Education, Arts and Culture, Sen. Teresa Aquino-Oreta.

The President. Sen. Teresa Aquino-Oreta is recognized.

Senator Drilon. Mr. President, to interpellate the principal sponsor, may I ask the Chair to recognize Sen. Aquilino Q. Pimentel, Jr.

The President. Sen. Aquilino Q. Pimentel Jr. is recognized.

Senator Pimentel. Mr. President, will the lady Senator kindly respond to a few questions?

Senator Oreta. With pleasure, Mr. President.

Senator Pimentel. Mr. President, in Section 3, under paragraph 3.2 of the proposed bill, it states that among the objectives is to enhance the physical, social, emotional, cognitive, psychological, language and spiritual development of young children.

May we know how this is supposed to be achieved?

Senator Oreta. Mr. Fresident, studies have shown that the early years of a child, that is from zero to 5 years old, is the most critical and formative years of a child. With this program, we can introduce to the child the basic needs, like health development and learning. The physical, social, emotional,