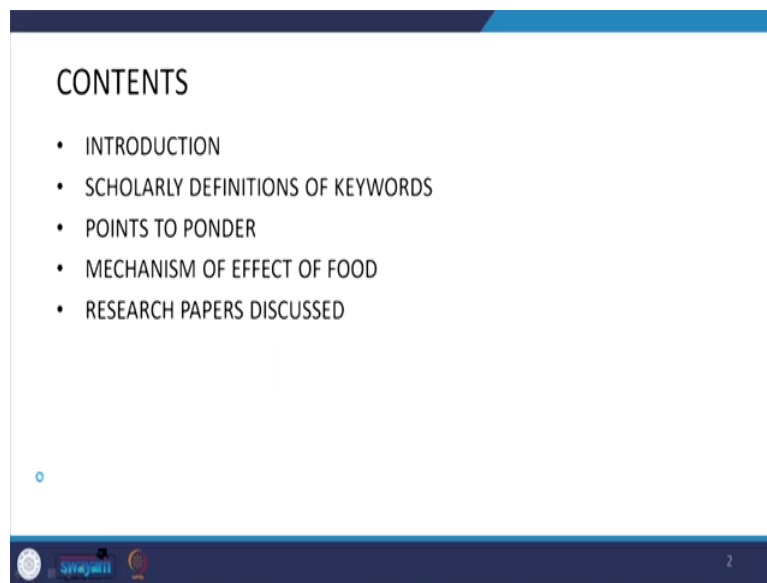


Managerial Skills for Interpersonal Dynamics
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Lecture 54
Emotion, Nutrition and Brain

In this session, we will talk about the very very interesting factors which play the role into the interpersonal relationship and that is emotion, nutrition and brain.

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Now, here in this particular aspects first we will discuss about the, what are these concepts about and what are the different perception about these concepts, then the scholarly definition of these keywords which are relevant to these particular session. Then the points to ponder which will be in detail will be discussing. Mechanism of the effect of food that is the how the food is making the effect on our thought process and the research papers.

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KEYWORD : EMOTIONS

Name of author/Sources	Definition
Panksepp, Jaak (1984)	compared to moods, "emotions reflect the intense arousal of brain systems that strongly encourage the organism to act impulsively.
Clore, Jerald L (1988)	emotion term refers to internal mental states that are primarily focused on affect

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So, in the beginning the emotions, I will talk about the 1984 the Panksepp, Jaak is talked about that is the he as compared to moods, emotions reflect the intense arousal of brain systems, that strongly encourage the organism to act impulsively. So, therefore, as when we talk about the attitude and behavior, then definitely there will be certain impulse and when there will be certain impulse, those impulse will making the effect on that is the how we can work for the our actions are directed.

So, therefore, in that case, that particular impulse that is creating the organisms and in the sense that is that as a result of organisms, so our behavior is there because we act accordingly. So, most and important point is that is the impulse and then when we talk about the senses, then the senses are the main source for the impulses there. So, when we want to control our emotions then in controlling the, our emotions, the first and foremost part that comes about it, how do you control your senses?

In the another paper, that is by the Clore, Jerald L in 1988, he talks about the emotion term refers to the internal mental states that are primarily focused on affect. So, therefore, in that case, it will be the ultimately these are the emotional terms are there which are making the refers to internal mental state. So, if somebody talks about maybe different emotions, so emotions can be of the love, affection, belongingness, anger, jealous, a courage. So, whatever the emotions are there, and all those emotions, so, that those emotions they are becoming the primary focus on that are going to affect is there.

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Name of author/Sources	Definition
Sternberg, R.	An emotion is a feeling comprising physiological and behavioral (and possibly cognitive) reactions to internal and external events."
Ellsworth, Phoebe (1992)	the process of emotion is initiated when one's attention is captured by some discrepancy or change. When this happens , one's state is different, physiologically and psychologically, from what it was before. This might be called a "state of preparedness" for an emotion .

This Sternberg are in the another definition he talks about an emotion is a feeling comprising the physiological and behavior. Now, here it is very, very important to understand that is the emotions are not only the psychological aspects. Emotions are all according to this Sternberg the emotions are also it is reflecting about that is the physiological behavior is there and that is why when we talking we are combining this particular topic about the emotions and brain and nutrition. So, therefore, it because the enough literature support is there, which talks about it is it is a physiological. And when it is a physiological is there definitely in that case, our body conditions that are also going to affect to our emotions.

And second factor which the Sternberg has mentioned that is about the behavior and when we talk about the behavioral aspect, so in the behavioral aspect, it becomes the possibly cognitive. The possibly, cognitive means, that is the, our mind our mind then start behaving on our physiological conditions. Therefore, in when we talk about the physiological conditions they are affecting, that was about our behavior is there and there our mind starts working on the cognitive way. So, when we are talking about the cognitive way to interact then in that case definitely it is becoming the you can say as a factor, which is affecting the cognitive behavior on the basis of the physiological conditions. So, it was really a very-very interesting finding by a Sternberg.

And when we are acting cognitively on the basis of this particular aspect of basis of the physiology then definitely in that case, our internal and external events are also occurring accordingly. Suppose, we talk about the joy, we talk about the happiness and then in both the cases we will find that is it is getting affected by these reactions on the physiological and

behavioral aspects. So, that it means that, that there is a need, there is a need to understand that is the how our feeling or comprising the physiological. So, our feelings are coming out then on the basis of our bodily movements also.

In the another paper by the Ellsworth, Phoebe in 1992, he talks about the process of emotion is initiated, when one's attention is captured by some discrepancy or change. And therefore, in that case, that attention is there and if there is an attention is initiated, then definitely in that case, because as I mentioned our senses, so senses means eyes. When your eyes are capturing any particular moment and then and then as a result of which our attention is going on that particular moment. Whenever movement is then diverted towards the one's attention, then definitely in that case that particular discrepancy of change will occur.

Emotions will change, our state of mind will change because our eyes have captured something and when you capture this, a particular object, immediately that object will give a stimulus and as a stimulus will be there, the thought process will change. So, many times when we talk about that is the surrounding, surroundings are playing a very important role in case of the emotions, production of emotions. Then those emotions are produced on the basis of because of the surroundings, surroundings are sensitizing the human being and as either by the eyes or by the smell or by the hearing.

So, therefore, in that case that will making the change in the emotion states. So, emotion states are also depending on upon our, the whatever we capture from the surrounding. When this happens, one state is different physiologically and psychologically. Now here the, we have to understand that is the in case of the emotions as a Sternberg has said that is it is a physiological and behavioral science. And here he talks about the Ellsworth talks about that it is a physiological and psychological both and as a result of which we find there is a change from what it was before.

So, as soon as our physiological changes there, immediately there will psychological change and when both will into their then it will be not as a before but it will be getting the in a different directions. This might be called a state of preparedness for an emotion. It is wonderfully defined, that is the, what is the preparedness. So, preparedness is means depending on the physiological and psychological aspects.

So, in the physiological and psychological aspects it is becoming a very-very important that is the, it is going to be the change into the surroundings or the control of senses, direction of

senses, which are making the psychological change and the behavior is occurred. So, according to the Ellsworth, it is not only the physiological but it is also the psychological change is there.

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KEYWORD : NUTRITION	
Name of author/Sources	Definition
WHO	Nutrition is the intake of food, considered in relation to the body's dietary needs
Merriam-Webster	the sum of the processes by which an animal or plant takes in and utilizes food substances
Adam Brook over	Nutrition is the sum total of the processes involved in the taking in and the utilization of food substances by which growth, repair and maintenance of the body are accomplished. It involves ingestion, digestion, absorption and assimilation. Nutrients are stored by the body in various forms and drawn upon when the food intake is not sufficient.

According to the World Health Organization, nutrition is the intake of food, what is nutrition? So, nutrition is the intake of food, considered in relation to the body's dietary needs. So, therefore, in that case, whatever our bodies need is there and accordingly we are supplying that particular need with the in the form of the food is there. In the Merriam Webster, the some of the processes by which an animal, a plant takes in and utilizes the food substance is there. So, therefore, it is the nutrition is the process by which an animal, a plant takes it and utilizes the food substance. Therefore, the nutrition is not the food but it is a complete process from the intake of those particular food items and then taking the particular food substance.

Adam Brook over, has defined the nutrition, nutrition is the sum total of the processes involved in the taking in and utilization of food substance by which growth, repair and maintenance of the body are accomplished. So, normally we understand that is while taking the food it is a growth is there. But interestingly, here, Adam Brook talks about that is it is not only the growth, but it is a repair also and this repair and maintenance of the body and they are creating this particular type of this the this process of the nutrition is there.

So, it is not only the growth and maintenance, but it is way repair also. This is very very interesting point. It involves ingestion, digestion, absorption and assimilation. So, process of nutrition, it is the taking the food and then the digesting that particular food which has been

absorbed which is supposed to be absorbed by the body and then definitely accordingly the assimilation will be occur. Nutrients are stored by the body in various forms and drawn upon when the food intake is not sufficient.

And therefore, when we talk about the deficiency is there, then in that case, it means that whatever the intake is taken, that intake is not sufficient for the maintenance of the body. And if they meant for the maintenance of the body, the food contains a specific food contents are not enough then definitely there will be no chance of the repair is there. So, therefore, we have to keep in mind that is the food, it does not only that is for the growth purpose, it is not only the supplement for the development, but it is also for the taking proactive action in case of the maintenance. And also if there is any deficiencies there, so in the deficiency it will be for the repair also.

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KEYWORD : BRAIN	
Name of author/Sources	Definition
Medicinet	The portion of the central nervous system that is located within the skull. It functions as a primary receiver, organizer, and distributor of information for the body. It has a right half and a left half, each of which is called a hemisphere.
Oxford	An organ of soft nervous tissue contained in the skull of vertebrates, functioning as the <u>coordinating centre of sensation and intellectual and nervous activity.</u>

Medicinet, the portion of the central nervous system that is located within the skull, it functions as a primary receiver, organizer and distributor of the information for the body and now when we talk about the brain. So, we talked about the emotions, we talked about the nutrition and now we talk about the brain. So, when we talk about the brain, it is the central nervous system and that in that central nervous system, which is within the skull, it functions as a primary receiver, organizer and distributor of information for the body.

It has a right half and a left half. Normally it is known and each of which is called a hemisphere. So, we are having the right hemisphere and the left hemisphere is there. So it is a distribution of information by the body in the by the brain. Oxford, an organ of the soft

nervous tissue contained in the skull of the vertebrates, functioning as the coordinating center of sensation and intellectual and nervous activity. And therefore in that case, brain is functioning for the sensation and intellectual and nervous activity is there. And the points to be very interesting that is a brain is always on.

Therefore this functioning when we are talking about the functioning of the brain like here we have seen that is the, it is a coordinating center of sensation. So, it is it is when the coordinating center of the sensation and intellectual and nervous activity, this is it is continuous. It is a continuous process because here we will find that is that sensational and intellectual nervous activity is totally for 24 hours and therefore in that case we say brain is always on.

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POINTS TO PONDER

- Brain is always "on."
- It takes care of your thoughts and movements, your breathing and heartbeat, your senses — it works hard 24/7, even while you're asleep.
- This means your brain requires a constant supply of fuel.
- How do you think the fuel effects the functioning of this perpetually-running machine???
- The "fuel" comes from the foods you eat — and what's in that fuel makes all the difference. Put simply, what you eat directly affects the structure and function of your brain and, ultimately, your mood.

Handwritten notes in red ink:
- A red circle around the word "on" in the first bullet point.
- "In the present relation" written next to the last bullet point.
- "FUEL/Food - Brain - Mood." written at the bottom right of the slide.

It takes care of your thoughts and moments. So, whatever thoughts and moments are there that has been taken care by that is the nervous system that is the brain. You are breathing and the heartbeat and your senses. It works are twenty four by seven even while we are in sleep. So, therefore, in that case, it is the brain we are functioning is very becoming very-very important. Because the brain is taking care of, it is of our thoughts and moments also.

So, therefore, in that case there we have to understand that is the even consciously or unconsciously we are controlled, we are controlled and we are reflecting also with the whatever the thoughts and moments are there. And in the physiological conditions also our breathing in a heartbeat that is also taken care of by the brain. So, nothing can stop then it is working by the twenty four by seven. This means your brain requires a constant supply of

fuel because our brain is working twenty four hours and then to work the brain energetically, so that fuel is required and when there is a fuel then then there will be the constant supply.

How do you think the fuel effects of functioning of these perpetually running machine? So, therefore, whatever our basically the machine is working and then the how the fuel and is affecting this particular machine. The fuel comes from the food you eat and what is in that fuel makes all the difference, like when we are running the vehicle, we take care of the quality, quality of the fuel and when you are taking the quality of fuel similarly, our brain is working and for our brain, we have to take care of the quality of the food what we are taking.

We put simply what we you, it directly affects the structure and function of your brain and ultimately your mood. This is very-very important. That is it is not only the affecting the capacity of the brain that is a structure and function of the brain. But it is also affecting that ultimately our mood. So, therefore it is the in fact it is the fuel, fuel means food, food is going to the brain and that bring this fuel to the brain that will decide our mood and that what we are discussing today that is the how emotion, nutrition and these food is important.

Now, here also we have to understand that our mood, I have discussed this in the emotions and mood chapter also that is the, our mood will decide our interpersonal relationship. This is to be very carefully noted. So here, when we are talking about that is how this chain is going on. The food will decide or the brain will decide about the mood and mood will decide about the interpersonal relationship. So, we have to be very careful that is the, what we are taking and the food we are taking and that food will decide about our interpersonal relationships is there. So, here I would like to take the certain research papers.

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Research Papers discussed

- **Journal Details:-** Fernando Gómez-Pinilla, Science And Society, Volume 9, July 2018
- **Title of the paper :-** Brain foods: the effects of nutrients on brain function
- **Key Takeaway:-** Dietary manipulations are a viable strategy for enhancing cognitive abilities and protecting the brain from damage, promoting repair and counteracting the effects of aging. Emerging research indicates that the effects of diet on the brain are integrated with the actions of other lifestyle modalities, such as exercise and sleep.

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This is a paper that is in the journal Science and Society in volume nine, and this has been by the Fernando Gomez- Pinilla in this, it talks about that is the it published in the volume nine July 2018 that talks about the brain foods, the effect of nutrients on brain function. The key takeaways are dietary manipulations are a viable strategy for the enhancing cognitive abilities. Now, we have to understand why a particular person behave in a particular way, the major aspect on this that is the how a particular why this particular behavior is occurring.

And therefore, in that case, we always also talk to our friends that is that if any friend is becoming very angry, we say, have you taken more chili today, so that means, it is just a joke apart, it is this like that, that is the it why he has taken a certain food, which is making him more angry or when somebody talks a very sweet, so we say that is he must be the sweet eater. So, therefore, in that case it means that it takes a lot of sweets that is why he speaks sweet.

So, therefore, in that case, it is the cognitive ability, the mindset and the mind function and the mindset reflection. So, therefore, in that here in this paper also it is that enhancing cognitive abilities are there. I also discuss the IQ plus EQ plus SQ in our previous session and here we are talked about related to this paper where I can connect that is the whenever we are taking the viable strategy for enhancing cognitive abilities, then in that case definitely that we are talking about the IQ.

But we have understood the function of brain and therefore, these emotions or moods these emotions or moods are because of that particular food which we have taken or we have discussed here like that is a fuel. So, therefore, this is creating the particular emotional quotient and then then and the can, can this can be control. Now when we are talking about the cognitive ability I would also like to connect it with the SQ that is a spiritual quotient. So whenever there is a spiritual quotient, spiritual quotients ability then like in spiritual, we talk about the commitment and devotion.

So, it is very interesting to know does the loyalty, commitment because the happiness optimism that we have understood that is it depends on this particular physiological and psychological environment in our previous session but here when we are talking about the value systems, does the food play a role into developing the value system? According to this paper by these Fernando it shows that yes, there are the cognitive abilities. So when we talk about the cognitive abilities, it means that there is the, we here we talk about that yes, these cognitive abilities are decided on the basis of our, the thought process and the action and behavior.

And this dietary into eating your habits and all, protecting the brain from damage, so therefore in that case when we are taking these particular dietary manipulation it on one side it is like here the protecting the brain from damage that is the repair also and the maintenance and proactiveness and they are promoting the repair and the counteracting the effects of aging. So, dear friends that is the type of food, the nutrition, the contents, which we are taking then those particular contents that that we are to take care with the help of the protecting the brain from the damage is there.

It will protect our brain from the damage then we are here to see that is the, our aging effect that will also affect. So, if you are taking the regular, we are taking the nutritious food, then definitely we are also fighting with the aging system. And therefore, , we find that is a some people they are senior very senior, but they do not look that old and they are behind certain people, they are not that very senior, but they look old. So, therefore, then that is the food system that is also affecting according to this paper, that is the how your aging system and your cognitive abilities, decision making abilities, there your mindset, your brain decision that is affecting with the help of the food.

Emerging research indicates that the effects of diet on the brain are integrated with the actions of other lifestyle modalities. These are another very very important aspect that is, the

what is the lifestyle model it is there? So when we talk about that the person is very active. So, it is because of that is the food intake is there and the person is active.

When we say the person is slow and therefore, again this is because of the, the diet intake either he is taking or not taking a water type of taking that is affecting that is a person's activities, they are slow or the persons activities, they are speedy. So, therefore, in that case they it will decide the lifestyle modalities and when we decide the lifestyle modalities, then it will also decide the exercise and the sleep.

So, it is becoming very, very interesting, that is the whenever we are talking about a particular dietary manipulation, then dietary manipulation, this particular dietary manipulation and then the exercise and sleep. So, we have to see that is the how we can manipulate our dietary and as a result, we can we can direct and activate our exercises and we can control our sleep habits. So, if the person is of not having the proper dietary manipulations, then in that case he may have the excessive sleep or no sleep or he if he will direct his, the body in such a way that there will be the lot of exercises will be there.

So, here you will find that is the this research paper talks about that is the how the these the brain force the effect of nutrients on brain function. So, this is going to affect in the case of the brain decision making and the life modalities and physiological and psychological activities like the exercise and the sleep.

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- **Journal Details:**-Dallman, M. F., Pecoraro, N. C., & la Fleur, S. E. (2005) Brain, behavior, and immunity, 19(4), 275-280.
- **Title of the Paper:**-Chronic stress and comfort foods: Self-medication and abdominal obesity
- **Key Takeaway:**-Students under stress report shifting ingestion from normal (fruits, vegetables, fish, and meat) to sweet and savory foods. Moreover, stress precipitates binge eating and women under acute lab stress increase "comfort food". Persisting in this behavior either as habit or for self-medication yields abdominal obesity. Increased abdominal fat stores are strongly associated with the metabolic syndrome, hypertension, type 2 diabetes, and cardiovascular disease, morbidity and mortality.

Now, I would like to mention about the another paper, that is a Dallman, M. F. Pecoraro, N. C., & la Fleur, S. E. in 2005 that is the brain, behavior and immunity in journal and that is a

volume 19 number 4, page number 275 to 280. The title of the paper is chronic stress and comfort foods that is a self-medication and the abdominal obesity. Now, this is also that the, we are talked about the stress, stress and performance. So, therefore, this chronic stress and comfort foods, so therefore, self-medication and abdominal obesity, this is a very very interesting paper is there.

So, the in this paper the, it is described that students under stress report shifting ingestion from normal that is the fruits, vegetable, fish and meat to sweet and savory foods. So, whenever a person is under the stress, he will have the different food habits, the food habits will not be the same. So therefore in that case, that the person will be having the, they in a different that is about the like for example here is given that is the sweet and the savory foods are there.

So sweet and savory are there it means that the person is requiring more glucose and if more glucose is required, so then in that case he shifting from the his regular and normal the dietary that is about the fruits, vegetables, fish and meat, and he is going for the different type of the food. Moreover, stress precipitates being eating and woman under accurate left stress increase comfort food and therefore, in that case, we will find those who are under the stress, they will like to only have eat typical food and that food is called that is a comfort food and if they do not get the comfort food, they are under more stress.

So, in this stress relaxation session, we have to find out that is the how the one person is getting the affected by the, it is a food habit and then on the functioning of the brain. So, if the functioning of the brain will be affected or it would brain will be under stress. If there is not the proper the food supplement is there and food supplement is not there properly, then definitely there will be the this type of these biological, physiological changes will be seen.

And persisting in this behavior either as habit of a self-medication is abdominal obesity and we see that is the whenever we are more focused towards the comfort food rather than the what is the normal food then in that case there will be the obesity is there. So, obesity is because of the stress also. According to this paper, this particular type of these behavior, these food abnormal habits that will lead towards the obesity and this may be because of the stress. Increase abdominal fat stores are strongly associated with the metabolic syndrome, hypertension, type two diabetes and cardiovascular disease, morbidity and mortality also.

So, therefore, in that case it becomes very very important that is if you want to avoid this type all these type of the disease as a symptoms of the diseases, then definitely what is required is that is we have to continue with the normal food and normal food and distress. So, therefore, for the stress relaxation also we have to apply a dietary manipulation and then that will help us to work in the non (())(29:13).

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- **Journal Details:**- Guesry, P. (1998). Preventive medicine, 27(2), 189-194.
- **Title of the Paper :-** The role of nutrition in brain development.
- **Key Takeaway :-** The level of education of mother largely effects the iron status and the mental development of the child. Although, the level of iron in infants alters the immunity and the muscle strength of the infant.

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The last paper which I would like to discuss by the Guesry, P. 1998 preventive medicine, volumes 27 number 2 pages number 189 to 194 and the title of the paper is the role of nutrition in the brain development. The level education of the mother largely affects the iron status and the mental development of the child. So, therefore, in that case it is the when we want to supply more and more iron then definitely that iron status and mental development of the child. It depends on mother also.

Although the level of iron in infants alters the immunity and the muscle strength of the infant is there. And therefore, in that case, it becomes very-very important that is the, during this particular birth of the child, it becomes very important that is a particular content like the iron, they are playing a very important role and from that only the brain is going to be the developed.

So, therefore, what we understand that is the, the way we will having the normal diet, the way we will having the low stress we will having the more physiological and psychological the balance behavior and when balance behavior through the proper diet, the nutrition is there

from nutrition to going to the brain capacity and from the brain capacity it will going to the behavior and by behavior we can make the better world surrounding to us.

So, this is a, at just glimpse of that how the emotions, nutrition and is related with a performance behavior of the employees. So the brain works on nutrition, nutrition decides the emotions and emotions come out with the behavior. This is all about this particular session.

Thank you.