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This report has been divided into two parts:

**Part- A:** Routine Preparation, Class Commencement, and teaching load distribution

**Part- B:** Procedure adopted for effective curriculum delivery and implementation

**Part- A**

**Routine Preparation, Class Commencement, and teaching load distribution during the academic session 2020-21**

- The Routine and the Academic Calendar Sub-Committee is created to frame the Master Routine and the academic calendar of the College and the Convener of the Committee sends the same to different departments for preparation of departmental routines
- All departments then prepare their departmental routines based on the master routine provided by the committee and send it to the committee, which is finally approved by the Coordinator, IQAC and the Principal. Routine is prepared keeping into consideration the credit points prescribed in the University Curriculum, University Academic Calendar, Faculty Strength of the Department and Specialization of the Faculty Members.
- The Principal notifies commencement of classes of each semester on the basis of the University academic calendar
- At the beginning of each academic session, departmental meetings are held in which the teaching assignments of each faculty in each paper are decided upon before the commencement of an academic session.

## **Part- B**

### **Procedure Adopted for effective curriculum delivery and implementation during the academic session 2020-21**

#### **➤ *Informing students about the Class routine, lesson plan, CBCS curriculum and the mode of delivery to be adopted by the department***

The Class Routine for the Even and the Odd semester are provided to students and college authorities concerned on time. Lesson Plans are prepared by teachers for different courses prior to commencement of the classes after receiving their teaching load. The lesson plans are prepared in accordance to the number of lectures for the topic prescribed in the Affiliating University Curriculum. Teachers prepare their module plans and inform students through Google classroom, e-mail and WhatsApp group. This helps the students to become aware of the time frame and other subject specific modalities of the curriculum delivery.

In addition to the routine and lesson plan information, Departments have also taken specific initiatives to make the students aware of the CBCS curriculum and the mode of delivery. In this respect every department organizes orientation programmes for the newly admitted 1<sup>st</sup> semester students through google link.

#### **➤ *Mechanism of the curriculum delivery:***

With COVID-19 and the subsequent closure of education institutions following the lockdown, the teachers and students of the department had to face myriad challenges. The scenario had changed drastically: we could no longer be dependent on the chalk-and-talk method in the secure confines of the classroom with one-to-one interaction with our students. Teaching-Learning took place chiefly with ICT assistance through online platforms. Not that the concept of ICT was totally new. Even before the pandemic, the teachers used to send e-books, online journal articles to the students through e-mail. We could not „see“ our students-only their profiles or display pictures on our computer screen. They too could only hear their teachers through their smartphones or computers. We soon found out that our lectures needed to be attractive and innovative so that we could connect with our students, give them a „feel“ of the classroom. However, we discovered that online classes could be as motivational as they could be informative. The various strategies adopted by faculty

members helped remodel our pedagogy from a teacher-centric to a learner- centric one.

Each department followed a structured department specific curriculum delivery mechanism.

The schematic representation of the curriculum delivery mechanism of Department of

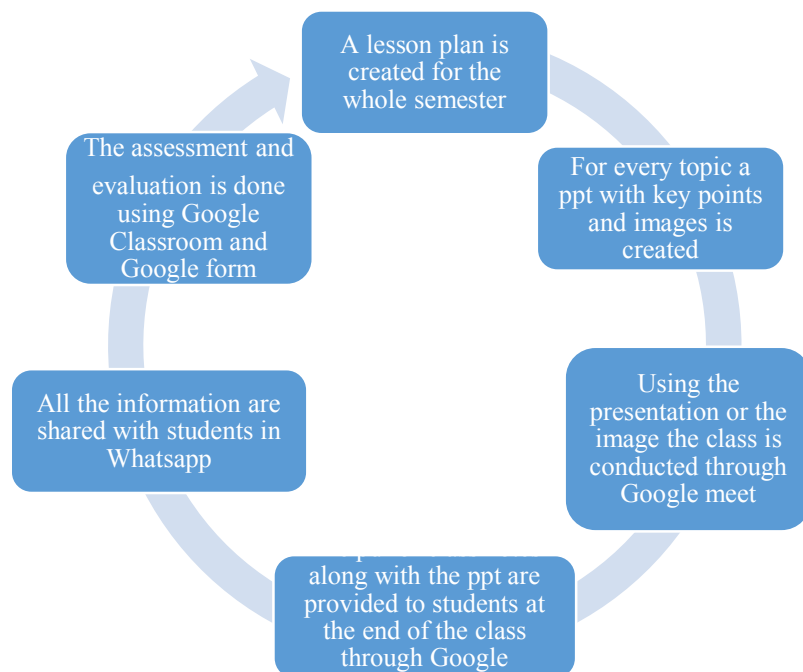


Fig: Process of Curriculum Delivery During the academic year 2020-21

➤ *Online Platforms used for classes during academic session 2020-21:*

**1. Zoom Platform:**

During this time period many department taken class through Zoom platform. It is the cloud based video conferencing plat form for meeting and group discussion. Teachers given meeting link and student joined class through the link.

**2. Skype Platform:**

During this time Geography department taken class through Skype platform. It is the cloud based video conferencing plat form for meeting and group discussion. Teachers given meeting link and student joined class through the link.

**3. Google Classroom and Google Meet:**

Google Classroom which is a cloud-based learning management system, enabled our students to access the platform from computers, tablets and smartphones. Teachers created Google Classroom for each semester so that they could create Google Docs and quizzes to manage assignments, post YouTube videos links and attach files (power points, PDFs) from Google Drive.

#### 4. Making Video Lectures available to students through Youtube:

Department of Political Science has uploaded the lectures of faculty members to ensure the availability to students at any time and also students can learn at their own pace.

#### 5. Email and WhatsApp groups with students:

Teachers are regularly sending material, assignments and assessments through email and WhatsApp groups created with students. The students are sending back completed assignments/assessments to be checked by respective teachers.

#### ➤ Some Glimpse of Online class:

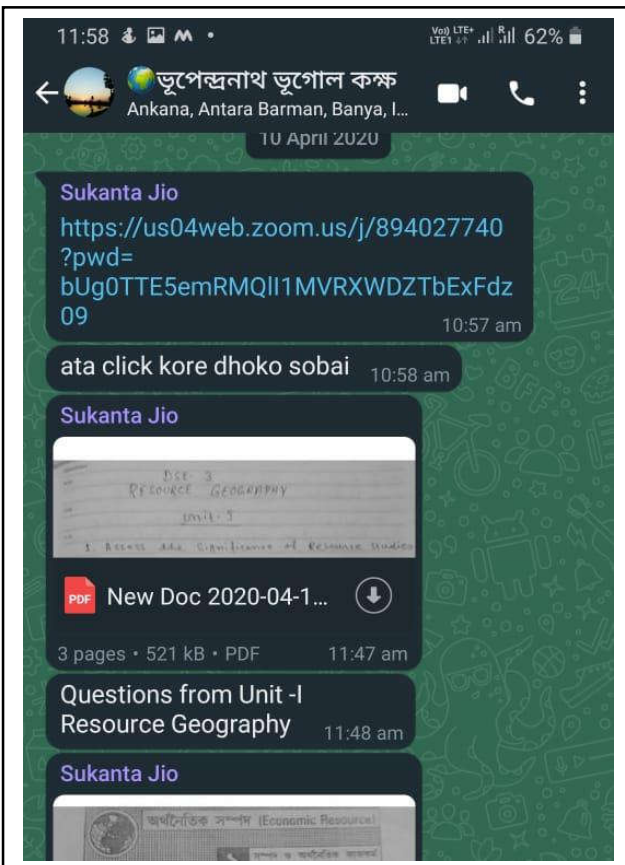


Plate-1: Use Zoom platform for Curriculum Delivery

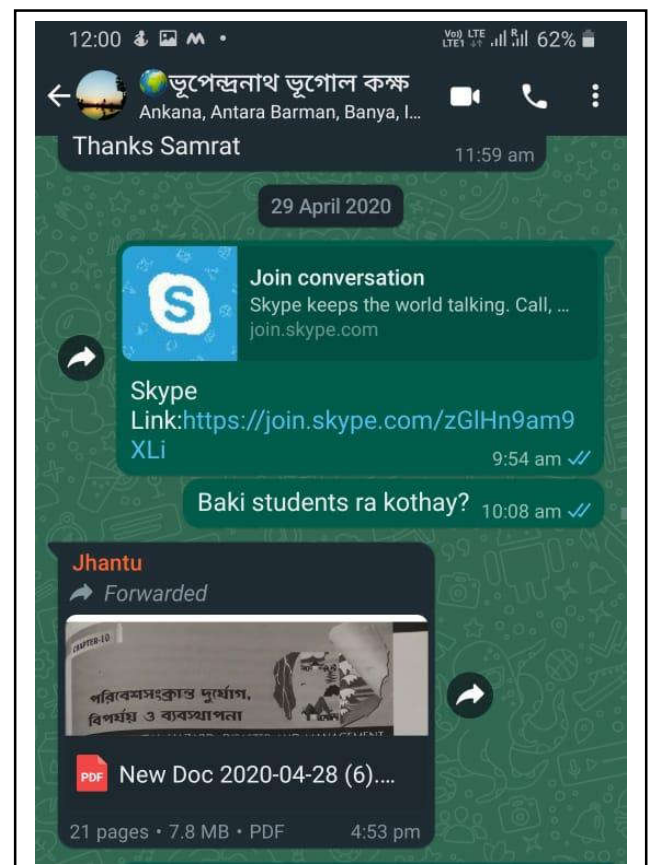


Plate-1: Use Skype platform for Curriculum Delivery

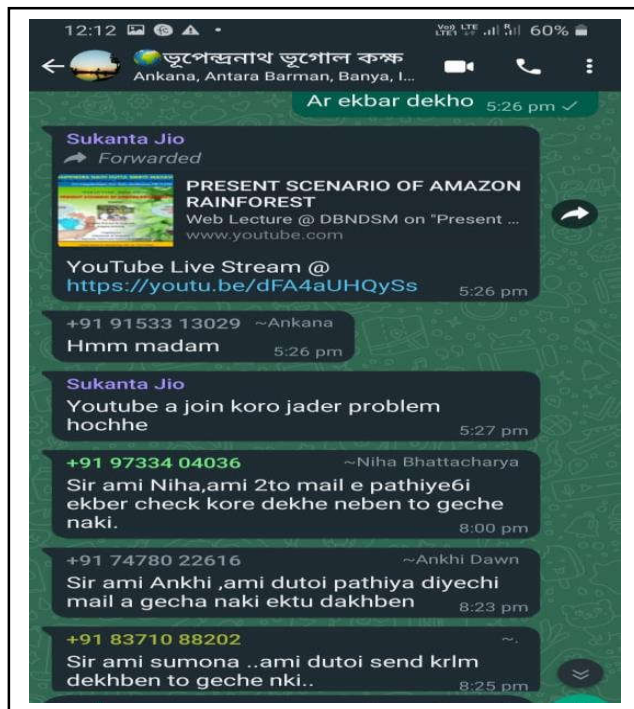


Plate-3: Use YouTube for knowledge gathering

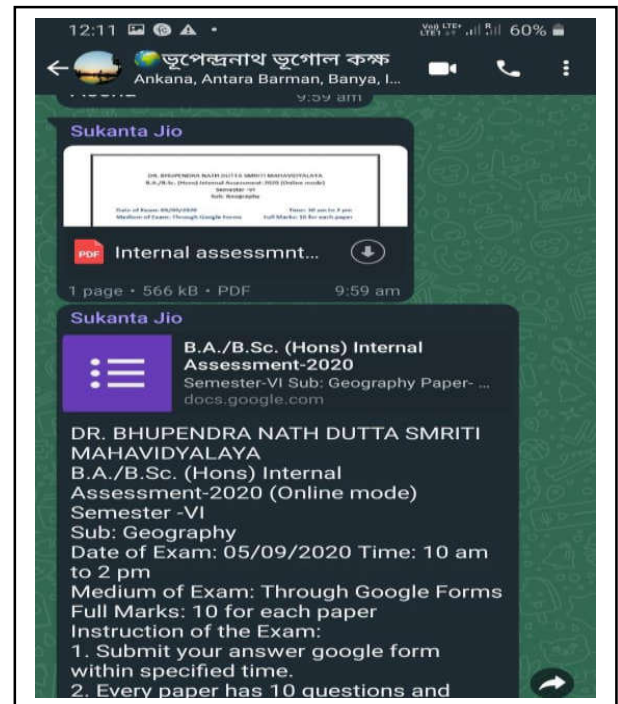


Plate-4: Use Google form for Evaluation



Plate-5: Use Google meet platform for Curriculum Delivery

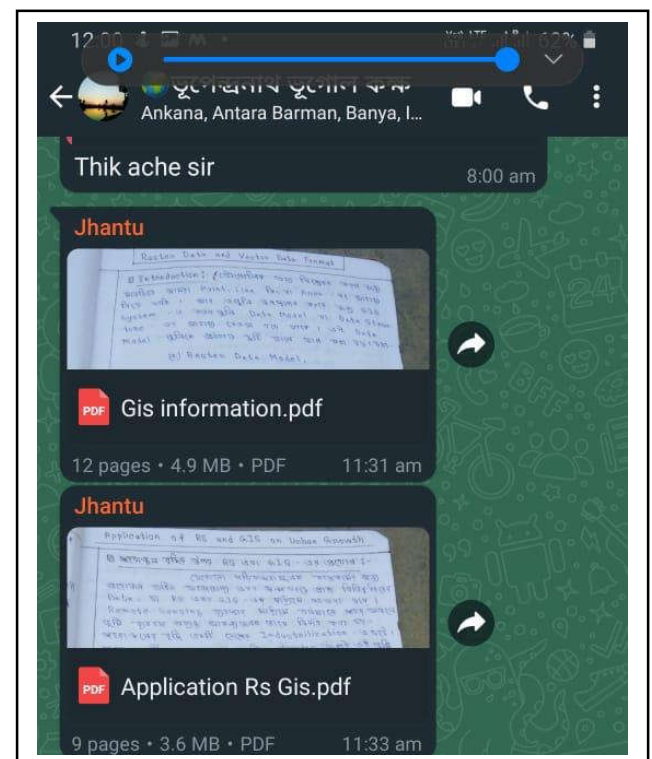


Plate-6: Use WhatsApp for Deliver Class Notes



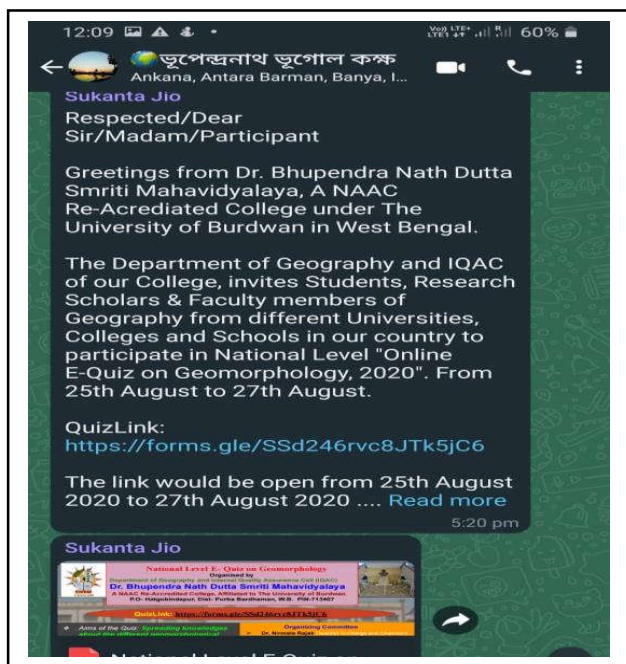


Plate-7: Link for National level Students Quiz Participation



Plate-8 : Teacher use PowerPoint for Curriculum Delivery in online mode

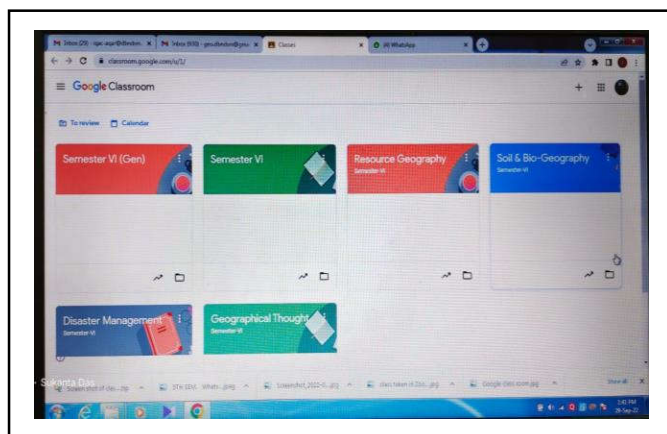


Plate-9: Used Google Class room for Curriculum Delivery

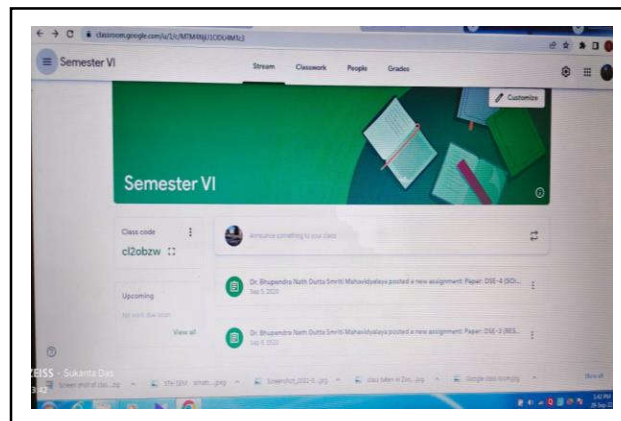


Plate-10 : Used Google class room for used Assignment declaration

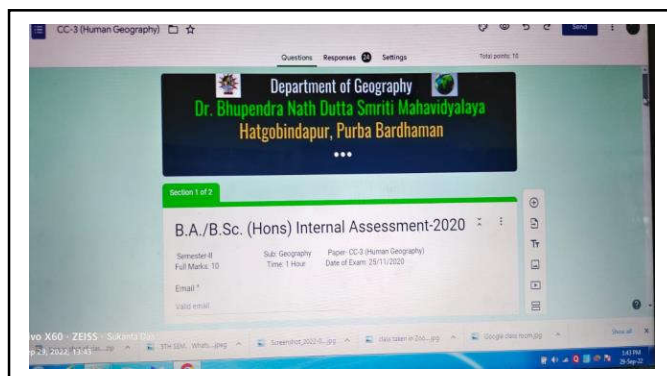


Plate-11: Used Google form for Evaluation

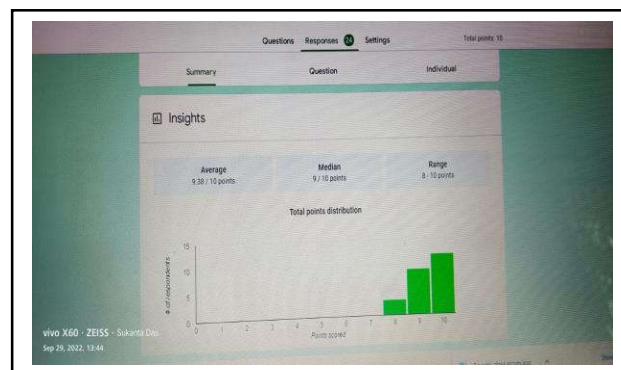



Plate-12 : Students response in Google form

➤ *Substitutes for curriculum delivery of the field work, project work and laboratory based courses:*

Curriculum delivery of the field work and laboratory based practical courses was the most challenging one in the pandemic situation. Although online mode cannot take the place of the hands on laboratory experiences and field visits, faculty members have adopted various strategies as the substitutes of the field work and laboratory based practical classes to deliver the knowledge of practical techniques. Department of Chemistry Prepare project on Food chemistry.

➤ **Some Glimpse of Field work:**



## Food Chemistry

Submitted by – Sandip Kumar Mukherjee  
 Subject – Dissertation followed by power point presentation  
 Student of – Burdwan University  
 Roll – 180312400032  
 Submitted to – Dr. Tandrima Chaudhuri

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### Food Chemistry Contents

content

• Introduction  
 • Carbohydrates

content

• Fats  
 • Proteins

content

• Vitamins  
 • Minerals

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### Introduction

- **Food Chemistry** : The Study Of Producing, Processing , Preparing ,Evaluating and using food.
- The Study Of how your body uses the food you eat is nutrition.
- Substances that are found in food and needed by the body to function, grow, repair itself and produce energy are called nutrients.
- Our body needs over 50 different nutrients which can be divided into 6 classes :

Carbohydrates

Fats

Proteins

Vitamins


Minerals

Water

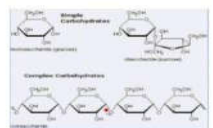
## Carbohydrates

- Made up of C, H and O in a 1:2:1 ratio
- **Functions** : (1) provide of body main source of energy (2) Provide bulk (3) Helps the body digest fats
- **Types** : (1) Simple – Sugars {basic – mono} (2) Complex – Starches And Fiber {Di , Poly }
- **Sources** : (1) Sugar – Honey ,jam (2) Fiber sources – fruits , vegetables , whole grains (3) Starch sources – breads , pasta

**Saturated**






**Unsaturated**



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## Fats

- Made up mostly of C and H with some O
- **Functions** : (1) Provides energy (2) Carries fat soluble vitamins (3) protects vital organs and provides insulation (4) provides essential fatty acids
- **Types** : (1) Fatty Acids (2) Cholesterol
- **Fatty Acids** : (1) saturated –raises, LDL (2) Polyunsaturated – decreases LDL (3) Monounsaturated – decreases LDL and increases HDL
- **Cholesterol** : (1) LDL – Bad Cholesterol (2) HDL – good Cholesterol
- Sources of Fats : (1) Cheese (2) Butter (3) Nuts (4) Meats (5) Dressings (6) Chocolate (7) Whole eggs (8) Fatty fish (9) Full fat yogurt
- **(A) Saturated Fats** from when each carbon atom in the fatty acid chain is joined to another carbon atom by a single covalent bond. Solid at room temperature (Ex: butter)
- **(B) Unsaturated Fats** from when there is a least one carbon-carbon double bond. Liquid at room temperature (ex: Olive oil)

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## Proteins

- Made up of C, H, O and N
- **Functions** : (1) Build and repair tissues. (2) Help body make important substances. (3) Regulate body processes. (4) Supply energy.
- **Types** : (1) Complete : contains adequate amounts of all essential amino acids. (2) Incomplete : Lacks some amino acids.
- **Sources** : (1) Meat – Complete (2) Milk – Complete (3) Eggs – Complete (4) Fish – Complete (5) Nuts – Incomplete (6) Legumes – Incomplete
- Proteins are polymer of amino acids

Amino
Carboxyl
Top 10 Sources of Veggie Protein
Which foods are complete



## Vitamins

- Can be divided into two main categories
- Fat-soluble vitamins : (1) dissolve in fats (2) can be stored in fatty tissues of the body
- Water-soluble vitamins : (1) dissolve in water (2) are not stored in the body

### Water-Soluble Vitamins

Nutrient	Functions	Sources
Vitamin C	Antioxidant, helps in collagen synthesis, wound healing, iron absorption	Citrus fruits, berries, kiwi, bell peppers, broccoli
Biotin	Essential for metabolism, skin health	Egg yolks, liver, nuts, seeds, whole grains
Pantoic acid	Essential for metabolism, skin health	Whole grains, legumes, vegetables, fruits
Niacin	Essential for metabolism, skin health	Whole grains, legumes, vegetables, fruits

### Fat-soluble Vitamins

Nutrient	Functions	Sources
Vitamin A	Essential for vision, skin health, immune system	Carrots, sweet potatoes, liver, fish oils
Vitamin D	Essential for bone health, immune system	Fatty fish, egg yolks, fortified milk
Vitamin E	Antioxidant, essential for skin health	Nuts, seeds, vegetable oils
Vitamin K	Essential for blood clotting, bone health	Leafy green vegetables, vegetable oils

## Minerals

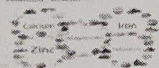
- Minerals can also be divided into two categories :
- Macro minerals are needed in amounts of 100mg or more
- Trace elements are needed in amounts less than 100mg per

### Macro-minerals

Nutrient	Functions	Sources
Calcium	Essential for bone health, muscle function	Dairy products, leafy greens, fortified foods
Magnesium	Essential for muscle function, bone health	Nuts, seeds, whole grains, leafy greens
Phosphorus	Essential for bone health, energy production	Meat, dairy, eggs, whole grains
Sulfur	Essential for protein synthesis, bone health	Meat, eggs, whole grains
Sodium	Essential for fluid balance, nerve function	Salt, processed foods
Chlorine	Essential for fluid balance, stomach acid	Salt, processed foods

### Trace-minerals

Nutrient	Functions	Sources
Iron	Essential for blood production, energy production	Meat, dairy, eggs, whole grains, fortified foods
Zinc	Essential for immune system, bone health	Meat, dairy, eggs, whole grains, fortified foods
Copper	Essential for blood production, bone health	Meat, dairy, eggs, whole grains, fortified foods
Manganese	Essential for bone health, energy production	Whole grains, nuts, seeds, leafy greens
Selenium	Antioxidant, essential for immune system	Meat, dairy, eggs, whole grains, fortified foods
Chromium	Essential for insulin sensitivity, blood sugar control	Whole grains, nuts, seeds, leafy greens



Food labels = must be all packaged food as of 1990 federal law

## HOW TO READ THE NEW FOOD LABEL

LOOK HERE FIRST

BALANCE WITH EXERCISE

Nutrition Facts	
Serving size 23 (100g)	
Amount per serving	
<b>Calories</b>	<b>230</b>
Total Fat 10g	20%
Sodium 100mg	20%
Total Carbohydrate 20g	40%
Total Sugars 10g	20%
Total Protein 10g	20%
*Percent Daily Values are based on a diet of other people's secrets.	

LIMIT THESE

CHOOSE WITH CARE

LOOK FOR THESE

*Amal*  
29/09/2022  
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