ANTHROPOLOGY NEWS DIARY

(AND)

29.05.2021

FOR UPSC CSE MAINS

This series provides compilation of daily CURRENT AFFAIRS of Anthropology.

It is aimed at addressing the requirement of aspirants to add contemporary aspects of the subject to the answers.

It also helps in understanding the trends of anthropology across India and the world.

**NOTE:** Please attempt the questions given at the end of the document and can upload on the [telegram channel: Sosin for Anthropology Q&A](https://telegram.com), for peer review.
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Note - For convenience, the respective reference links have been dropped at the end of every topic.
A. BIOLOGICAL ANTHROPOLOGY

1. Senescent Cell Removal

- Cell senescence, when stressed cells can no longer divide to make new cells, is considered a factor in aging and in some diseases. As your body ages, increasing amounts of cells enter into a state of senescence.
- Senolytic drugs as anti-aging drugs are a promising approach to remove senescent cells, but researchers are still trying to figure out the role of cellular senescence and different ways to approach it.
- Researchers at the University of California, San Francisco (UCSF), report they have discovered how immune cells naturally clear the body of senescent cells. Their new findings in mice may lead to new strategies and approaches to treating age-related chronic diseases with immunotherapy.
- The accumulation of senescent cells within tissues can drive the progression of diseases, wrote the researchers.
- While removal of senescent cells with senolytic drugs has emerged as a promising therapeutic approach, the ubiquitous target of these drugs makes clinical applications challenging.
- Immune cells known as invariant Natural Killer T (iNKT) cells function as a surveillance system, eliminating cells such as senescent cells. However, iNKT cells become less active with age and factors that contribute to chronic disease.
- The researchers started to investigate different ways to stimulate this natural surveillance system that offers an alternative to senolytic drugs.
- The scientists discovered they could remove senescent cells by using lipid antigens to activate iNKT cells. Researchers observed improvements in mice with diet-induced obesity. Their blood glucose levels improved, and mice with lung fibrosis had fewer damaged cells.
- The results provide the first evidence that iNKT cells can eliminate senescent cells in these two distinct models where tissue dysfunction is dependent on the accumulation of senescent cells.

Reference:

2. Post - Covid Nutrition

- A good diet promotes faster recovery.
- Adequate calories must be provided depending on the patient’s nutritional status. Malnutrition is not only having low body weight but also the inability to maintain healthy fat: muscle ratio.
- Patients with obesity often have respiratory dysfunction, impaired immune function, increased inflammation and low lung volume and muscle strength.
These individuals are more prone to pneumonia and cardiac stress. Obesity with diabetes is even more complicated. Caloric restriction is needed for ensuring healthy fat loss and lean mass maintenance in obese patients.

Protein is recommended to be at 1.2-1.3 g/kg per day; increasing the supplementation of branched-chain amino acids (BCAA) to 50 per cent, to prevent muscle loss and enhance the strength of respiratory muscles.

The total must not exceed 100-150g per day. The usage of carbohydrates leads to the production of equal carbon dioxide (called respiratory quotient) which must be avoided to decrease respiratory distress.

If the patient is diabetic, he/she has to be monitored closely for episodes of glucose highs and lows and the medication needs to be adjusted. Persistent high glucose is an effect of infection and can also delay recovery.

These are specific nutrients shown to have a considerable influence on immune function. There are several types of immunonutrients, such as arginine and glutamine which support both the immune and the digestive system. Curcumin (found in turmeric and as capsules) also aids recovery.

Probiotic supplements help to restore immunity.


B. SOCIO - CULTURAL ANTHROPOLOGY

1. Jajmani System

Jajmani system, reciprocal social and economic arrangements between families of different castes within a village community in India, by which one family exclusively performs certain services for the other, such as ministering to the ritual or providing agricultural labour, in return for pay, protection, and employment security.

These relations are supposed to continue from one generation to the next, and payment is normally made in the form of a fixed share in the harvest rather than in cash.

The patron family itself can be the client of another whom it patronizes for certain services and by whom it is in turn patronized for other services.

The hereditary character allows for certain forms of bond labour, since it is the family obligation to serve its hereditary patrons.

The jajmani ideal is suspected as the anthropological analogue of the same theoretical system presented by texts that describe a unified, conflict-free, reciprocal, and hierarchically weighted system of interrelated varnas (social classes).
C. ARCHAEOLOGICAL ANTHROPOLOGY

1. Oldest Known Mesolithic Temple

   **Context:**
   Göbekli Tepe is an archaeological site and multi-phase tell, believed to be the oldest known Mesolithic temple complex, located in the South-eastern Anatolia Region of Turkey.

   **Highlights:**
   - Occupation at the site attests to centuries of activity, with the earliest period dating from around the beginning of the Epipalaeolithic period (after the Upper Palaeolithic and before the Neolithic, defined by the appearance of microliths in the prehistory of the Near East).
   - The main structures identified have been dated to the Pre-Pottery Neolithic A (PPNA) from around the 10th millennium BC, with further remains of smaller buildings from the Pre-Pottery Neolithic B (PPNB), dated to the 9th millennium BC.
   - The tale first caught the attention of Istanbul University and the University of Chicago in 1963, which initially interpreted the T-shaped pillars to be grave markers dating from the Aceramic Neolithic period.
   - Archaeologists have since determined that the tell contains three distinct layers, with Layer III consisting of circular compounds or temene, and nearly 200 T-shaped limestone pillars (detected through geophysical surveys).
   - The layout of Göbekli Tepe follows a geometric pattern, in the form of an equilateral triangle that connects enclosures, suggesting that the early builders had a rudimentary knowledge of geometry.

   **Reference:**
   https://www.britannica.com/topic/jajmani-system
• Archaeologist Klaus Schmidt, who led the excavations at Göbekli Tepe from 1996 to 2014 has interpreted the site to be a stone-age mountain sanctuary, whilst Dragos Gheorghiu, an anthropologist and experimental archaeologist proposes that the monument was a cosmogonic map, relating the community to the surrounding landscape and the cosmos.

• Many of the pillars are decorated with pictograms and carved animal reliefs, such as lions, foxes, snakes, insects, birds, and bulls, suggesting that at the time of Layer III the surrounding landscape was most likely forested and contained a variety of animal life (in contrast to the dry, arid conditions of today).

• A few pillars are also believed to represent stylised humans, or possibly a deity, that has loincloths on the lower half of the pillar and arms.

• By Layer II during the Pre-Pottery Neolithic B (PPNB), the circular compounds gave way to rectangular buildings with doorless and windowless rooms.

• The tradition of constructing T-shaped pillars continued into this period, with the most notable being a pair decorated with fierce-looking lions and a pillar that depicts three different figures, reminiscent of the much later totem poles from North America.

• The final layer of Göbekli Tepe sees the site change in function from a ceremonial centre, to one of agriculture and farming. The stone monuments were deliberately backfilled sometime after 8000 BC under flint gravel and debris, remaining in situ until their rediscovery many thousands of years later.

Reference:
2. **25 Neolithic Dwellings Discovered**

**Context:**
25 Neolithic dwellings discovered on coast northwest of Seoul

**Highlights:**
- The scale of the New Stone Age houses in Gimpo's Daegot district, about 30 kilometers northwest of the capital, varies from 3.5 to 6.4 meters in width and 3.8 to 5.4 meters in length, and some dwelling structures, such as entrances and exits, remained relatively intact, the city government said.
- Several relics, such as comb-pattern pottery, were excavated at those house sites believed to be used in the early and middle Neolithic period.
- It is the first time Neolithic dwelling sites have been discovered in Gimpo.
- Neolithic architecture refers to structures encompassing housing and shelter from approximately 10,000 to 2,000 BC, the Neolithic period.
- In southwest Asia, Neolithic cultures appear soon after 10,000 BC, initially in the Levant and from there into the east and west.
- Early Neolithic structures and buildings can be found in southeast Anatolia, Syria, and Iraq by 8,000 BC with agrarian societies first appearing in southeast Europe by 6,500 BC, and central Europe by ca. 5,500 BC.
- In many villages during the Neolithic period, storage of a community’s excess crop production was handled at a communal level. Village structures were often centered around a carved-stone central grain or food storage facility, which would also be used to practice social and religious rituals.
- As animal domestication became prominent, some societies show evidence of structuring shelters for their livestock, depending on their climate and needs.

**Reference:**
https://m-en.yna.co.kr/view/AEN20210517006300315

**UPSC Previous year questions based on today’s concept:**
1. Senescence (S.N. - 1995)
2. Describe the Neolithic Culture of India (15 Marks - 2014)

**DAILY PRACTICE QUESTION/S FOR MAINS 2021.**

PL do not forget to upload your answer sheet for a peer review on the telegram channel: Sosin for Anthropology Q&A

1. Discuss how Jajmani system formed one of the basic features of Indian society, commenting on its current status. (20 Marks)