

2ª JORNADA de la Red Española de Investigación en COVID Persistente

COVID persistente: Avances hacia
una estrategia integral de cronicidad

2025

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Organizado por:

REiCOP
Red Española de Investigación
en COVID Persistente

Con la colaboración de:


Fundación "la Caixa"

Estudio piloto FASTCOV-P : Ayuno terapéutico en el Síndrome Post-Covid (LCS)

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de la Red Española
de Investigación en
COVID Persistente

COVID persistente: Avances hacia
una estrategia integral de cronicidad





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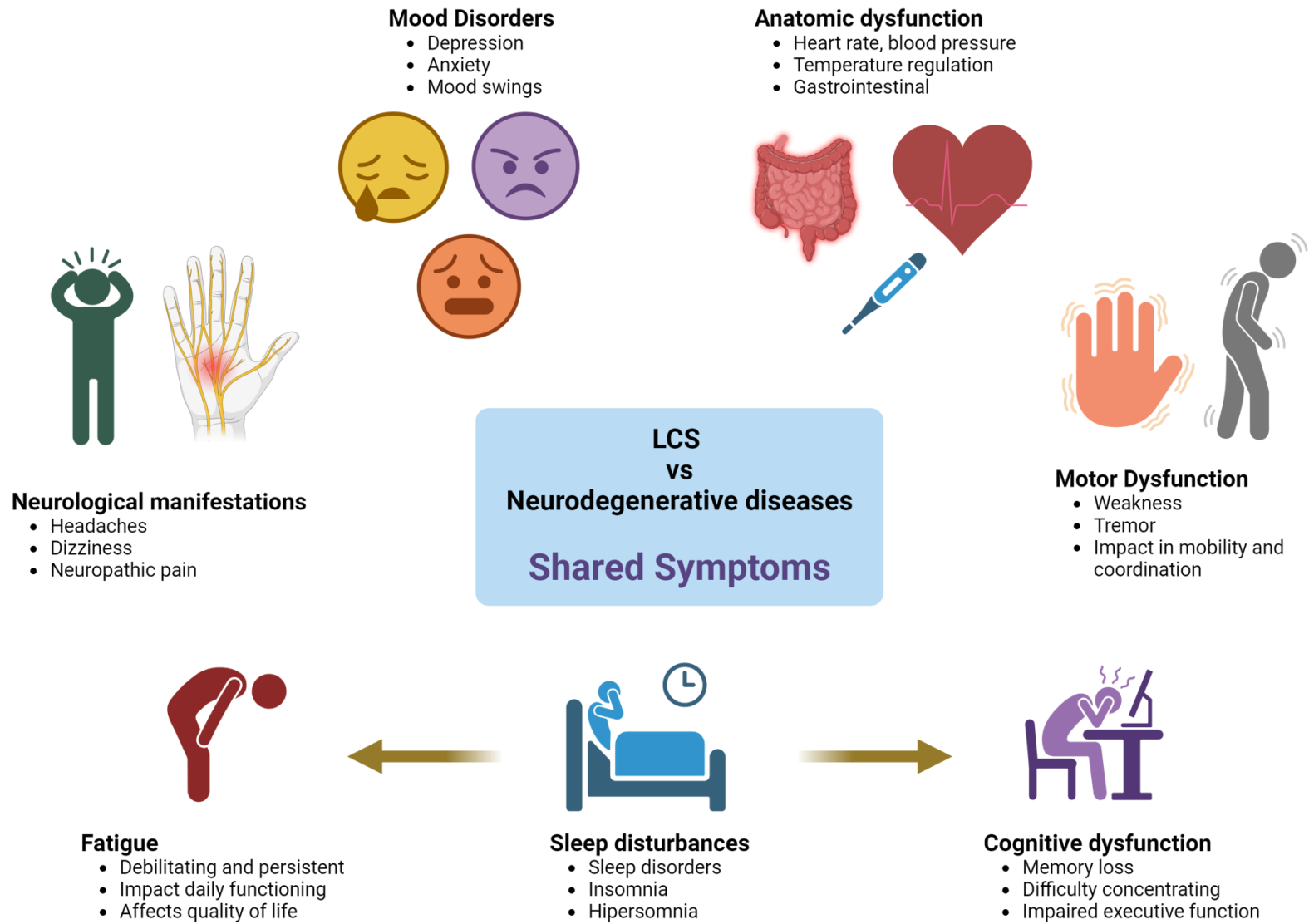


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Priv.-Doz. Dr. Daniela Koppold





Up to 10% post-acute SARS-CoV-2 infection



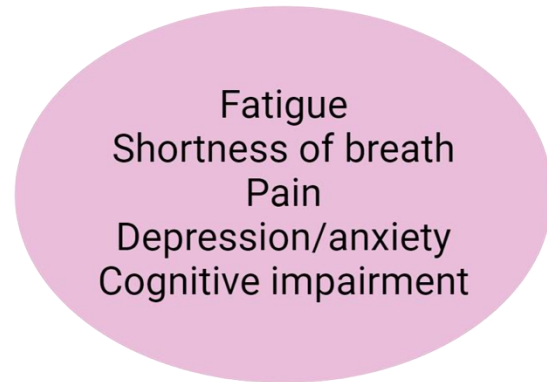
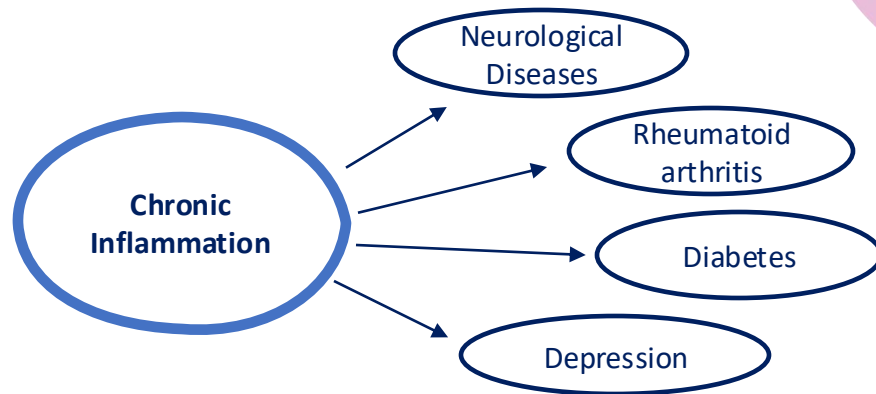
Victims can be any age, race and gender



Impact on daily life:

- Disruptions in work and lifestyle
- Socio-economic consequences: increased healthcare burdens, reduced productivity, social isolation, increased emotional stress

Similarities to chronic diseases



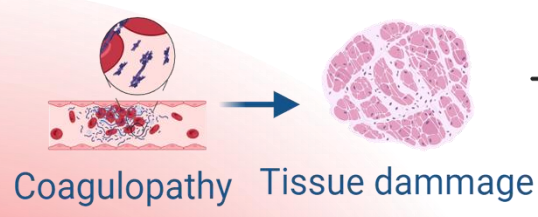
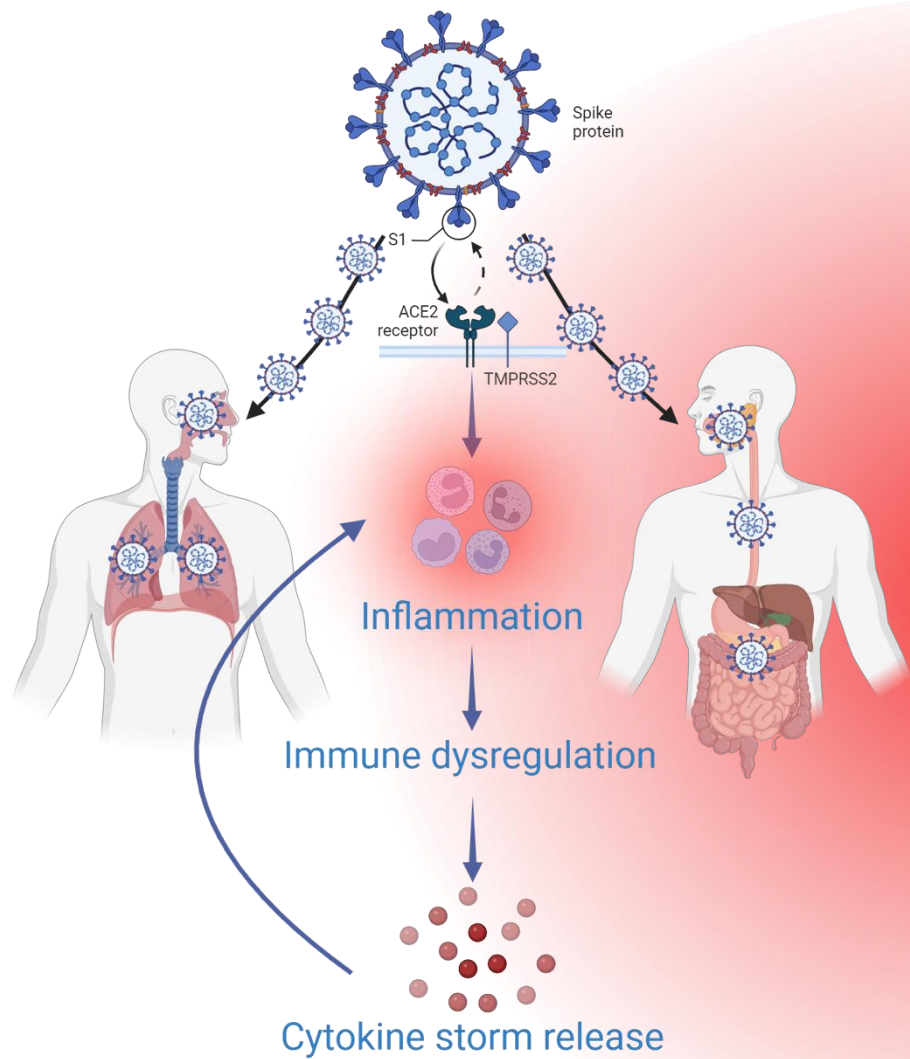
Challenges in therapeutic approach due to diverse pathophysiological components

- Need for alternative therapeutic solutions due to limited efficacy of pharmacotherapies

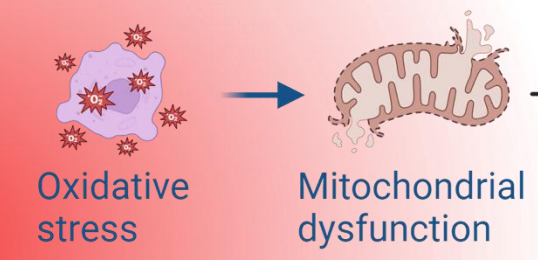


• LCS Fisiopatología

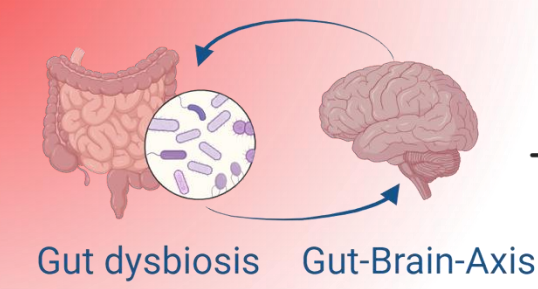
SARS-CoV-2



- Organ damage
- Cardiovascular risk
- Thrombosis
- Pulmonary embolisms



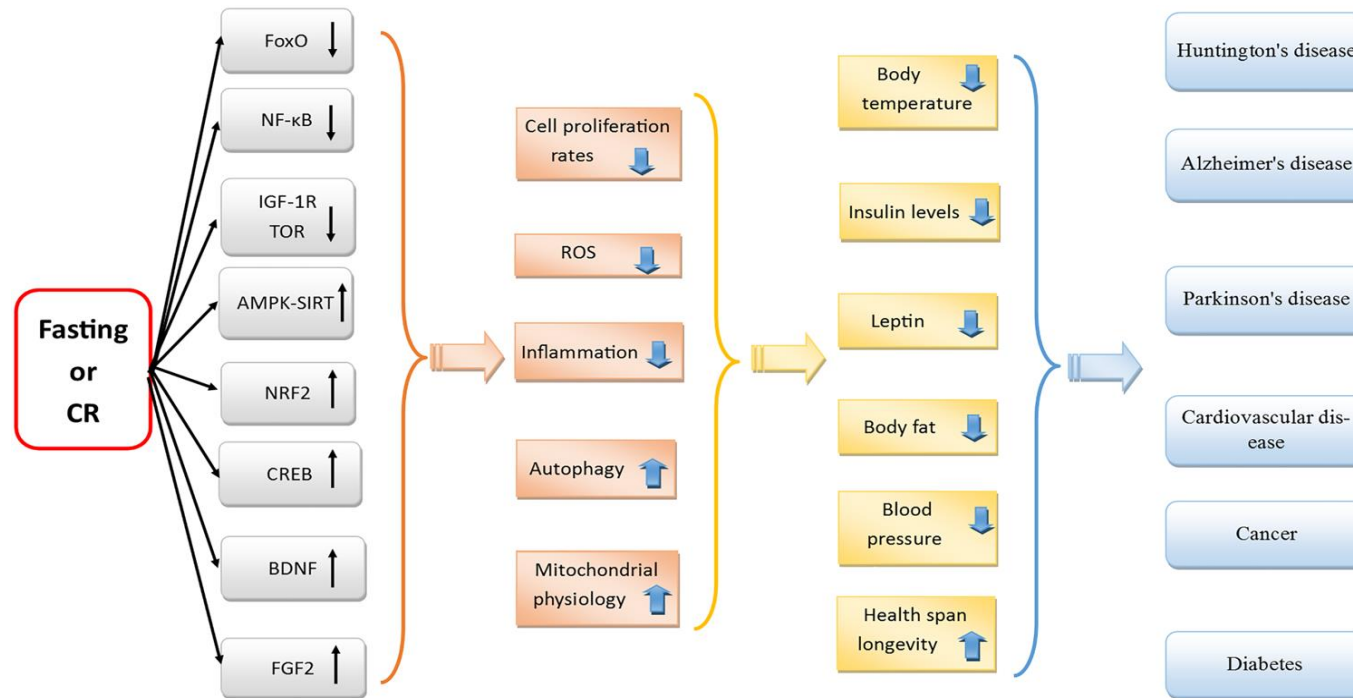
- Fatigue
- Muscle weakness and pain
- Brain fog and cognitive impairment
- Metabolic dysregulation



- Neuropsychiatric symptoms
- Cognitive dysfunction
- Altered stress response
- Gastrointestinal symptoms
- Metabolic abnormalities



- Evidencias emergentes sugieren que la inflamación crónica puede desempeñar un papel significativo en la fisiopatología del LCS. Por lo tanto, intervenciones dietéticas como la restricción calórica podrían ofrecer beneficios terapéuticos al modular las respuestas inmunitarias y mejorar los procesos metabólicos.



Fasting followed by vegetarian diet in patients with rheumatoid arthritis: a systematic review

H. Müller, F. Wilhelmi de Toledo, K.-L. Resch

To cite this article: H. Müller, F. Wilhelmi de Toledo, K.-L. Resch (2001) Fasting followed by vegetarian diet in patients with rheumatoid arthritis: a systematic review, *Scandinavian Journal of Rheumatology*, 30:1, 1-10, DOI: [10.1080/030097401750065256](https://doi.org/10.1080/030097401750065256)

To link to this article: <https://doi.org/10.1080/030097401750065256>

Effect of intermittent fasting on circulating inflammatory markers in obesity: A review of human trials

Andrea Mulas, Sofia Cienfuegos, Mark Ezpeleta, Shuhao Lin, Vasiliki Pavlou and Krista A. Varady*

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Alternate Day Calorie Restriction Improves Clinical Findings and Reduces Markers of Oxidative Stress and Inflammation in Overweight Adults with Moderate Asthma

James B. Johnson^{1,*}, Warren Summer², Roy G. Cutler³, Bronwen Martin³, Dong-Hoon Hyun³, Vishwa D. Dixit⁴, Michelle Pearson³, Matthew Nassar³, Stuart Maudsley³, Olga Carlson⁵, Sujit John⁶, Donald R. Laub⁷, and Mark P. Mattson³

- AIM

VIABILIDAD

1ª Fase

ESTUDIO PILOTO FASTCOV:
Explorando la viabilidad de una
dieta de restricción calórica
como intervención para el Long
COVID en adultos



Evaluar la factibilidad de una intervención ambulatoria de restricción calórica de 7 días utilizando el método Buchinger-Wilhelmi en adultos con LCS.



Explorar su impacto en parámetros clínicos, biológicos y psicológicos durante un período de 4 semanas.



Evaluar los cambios en la sintomatología psicológica asociados a la restricción calórica.



Describir los biomarcadores clínicos, el fenotipo inmunológico y los correlatos morfológicos basales en pacientes con LCS.



Research project
FastCoV

Overview	Background	Study design	Partners	Contact
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FastCoV: Study on the potential benefits of fasting for long Covid treatment



The project at a glance

Start date:
01 Feb 2024

Duration in months:
47

Funding:
University of Luxembourg, Direction de la Santé

Principal Investigator(s):
Jochen SCHNEIDER
Charles Benoy (external)
Raquel Gómez Bravo (external)

Long COVID syndrome is a post-acute complication of SARS-CoV-2 infection that occurs in up to 10% of cases and represents a significant global health threat. The duration and severity of long COVID vary widely. Among the most common symptoms are fatigue, shortness of breath, pain, and cognitive impairment, which can significantly affect daily activities, work, and quality of life. While promising pharmaceutical interventions are in development, their efficacy remains unproven. Therefore, alternative therapeutic solutions are urgently needed. Fasting diets are emerging as a potentially effective and accessible intervention. They target immunological dysregulation and gut microbiome imbalance, two hallmarks of both acute infection and long COVID syndrome.



« FASTCOV »: Récompense du MISA pour le Dr Raquel Gómez Bravo

avril 20, 2023



Le Dr Raquel Gómez Bravo, chercheuse clinicienne à la Rehaklinik, a été récompensée pour son projet de recherche « FASTCOV » par la Vice-Premier ministre et ministre de la Santé, Paulette Lenert.

L'objectif global du projet « FASTCOV » est d'améliorer la symptomatologie clinique et psychologique des patients atteints de COVID long et leur état de santé en appliquant la méthode du régime de jeûne Buchinger-Wilhelmi.

Voici l'équipe de recherche:

- Dr Raquel Gómez Bravo, MD, MSc, PhD (CHNP)
- Dr phil. Charles Benoy (CHNP)
- Prof. Dr med. Georg Jochen Schneider (LCSB)
- Prof. Dr med. Andreas Michalsen (University Clinic of Naturopathy at the Charité, Berlin, Germany)
- Prof. Gilbert Massard (Dpt. Of Life Science and Medicine (DLSM) at University of Luxembourg)
- Dr Maria Angeliki Pavlou (Dpt. Of Life Science and Medicine (DLSM) at University of Luxembourg)
- Dr Jacques Zimmer, MD, PhD (Luxembourg Institute of Health - LIH)

Recent Posts

- Publication du nouveau livre du Dr Charles Benoy
- Publication d'une étude internationale sur les conséquences psychiques en relation avec le syndrome Long-COVID
- La Rehaklinik renforce la voix de ses patients
- La Rehaklinik a participé à une étude publiée dans le journal «JMIR Public Health and Surveillance»
- Le savez-vous ? La Rehaklinik est membre du réseau EUCCOMS

Archives

- octobre 2023
- septembre 2023
- août 2023
- juin 2023
- mai 2023
- -----



FASTCOV Estudio piloto:

Estudio piloto

N=20

- | | | |
|--------------------------|---|------------------------------|
| • Recruitment | → | • CHNP |
| • Clinical visits | → | • CHNP |
| • Counselling | → | • Charité |
| • Inmunological analysis | → | • LIH |
| • Biomedical analyses | → | • Routine labo + DSLM + LCSB |
| • Microbiome analyses | → | • LCSB |

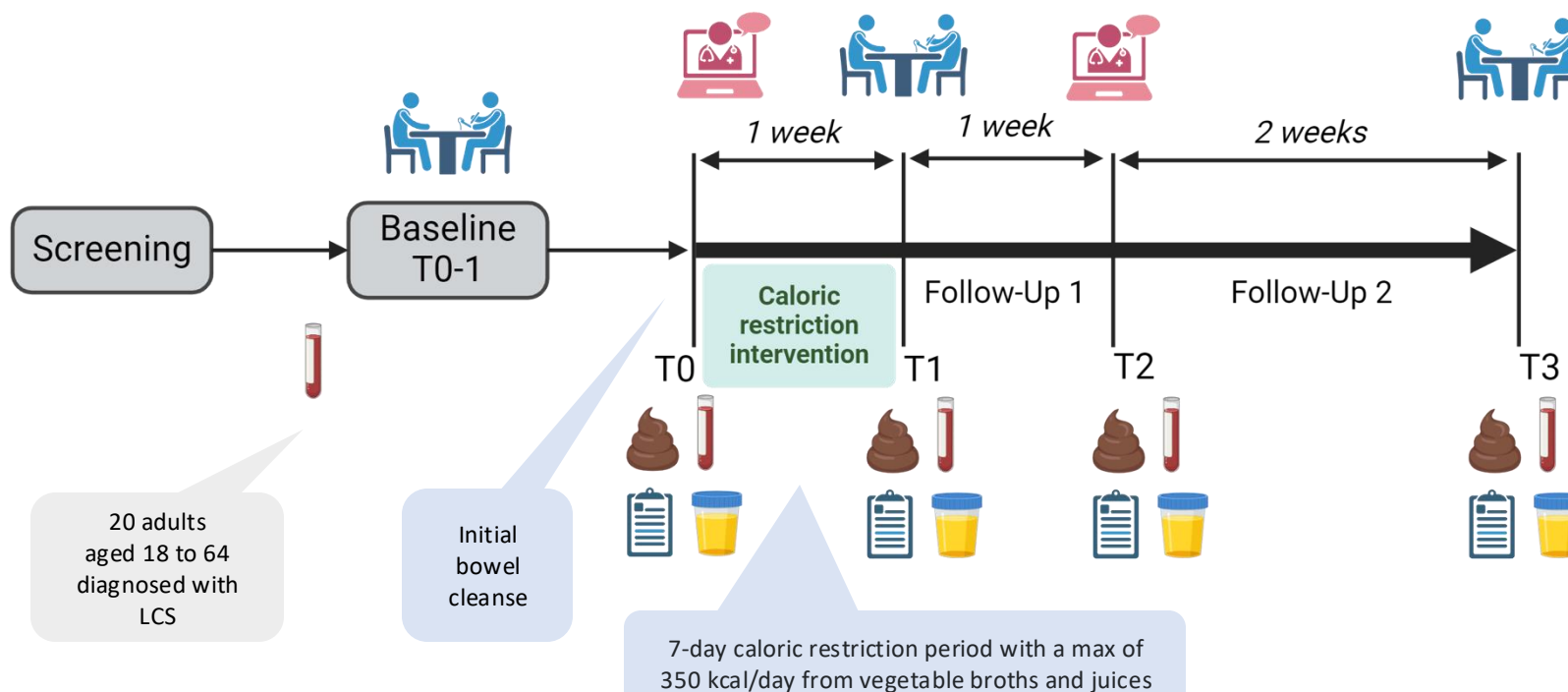


Caloric Restriction and Dietary Counseling:

Utilizing the Buchinger-Wilhelmi fasting regimen method
Close monitoring by trained nutritionists and physicians
7-day caloric restriction period with up to 350 kcal daily liquid intake

Patient inclusion criteria

- Age 18-64
- Diagnosis LCS (post-acute COVID-19 symptoms persisting ≥12 weeks)
- Normal body Mass Index (18.5 to 25 kg/m²)
- Marginal Iron status (PF< 25 ng/ml)
- Able to communicate in and comprehend English and/or German and/or French language
- Present written / signed declaration of consent
- Ability to understand the patient information and willingness to sign the consent form
- Consent to specimen collection and specimen use



20 adults aged 18 to 64 diagnosed with LCS

Initial bowel cleanse

7-day caloric restriction period with a max of 350 kcal/day from vegetable broths and juices

• PARTICIPANTES



Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> - Age 18-79 - Diagnosis LCS (post-acute COVID-19 symptoms persisting ≥ 12 weeks) - Normal body Mass Index (18.5 to 25 kg/m²) - Marginal Iron status (PF < 25 ng/ml) - Able to communicate in and comprehend English and/or German and/or French language - Present written / signed declaration of consent - Ability to understand the patient information and willingness to sign the consent form - Consent to specimen collection and specimen use 	<ul style="list-style-type: none"> - Current underweight condition (body mass index less than 18.5 kg/m²) or weight loss exceeding 3 kg within the last month or 5 kg within the last three months. - Existing / current eating disorder within the past five years (e.g., anorexia, bulimia). - Psychiatric condition that limits understanding of the examination protocol (unable to consent) - Severe internal disease (e.g., kidney deficiency with creatinine > 2mg/dl), chronic inflammatory illness other than LCS - Participation in another intervention study. - Existing vegan diet or type of caloric restriction during the last six months - Pregnancy or breastfeeding status. - Presence or suspicion of pre-existing ME/CFS or early autonomous dysfunction - Diagnosis of chronic inflammatory bowel diseases, celiac disease, or colorectal cancer according to the guidelines of the German Society of Gastroenterology - Use of anti-psychotic drugs - Antibiotic use during the previous 12 months - Start of novel drug therapy - Contraindication for additional blood draws (e.g., hemoglobin < 10)

• FASTCOV: Datos antropométricos y cuestionarios



Recogida de datos: REDCap



Medidas: Peso, altura, IMC, pulso, TA, ratio cintura / cadera



Cuestionarios : Estados de ánimo, Evaluación del Trastorno de Ansiedad Generalizada (GAD-7), Cuestionario de Salud del Paciente (PHQ-9), Escala de Evaluación de la Fatiga (FAS), Escala de Discapacidad de la OMS (WHODAS), Calidad de Vida de la OMS (WHOQOL-BREF).

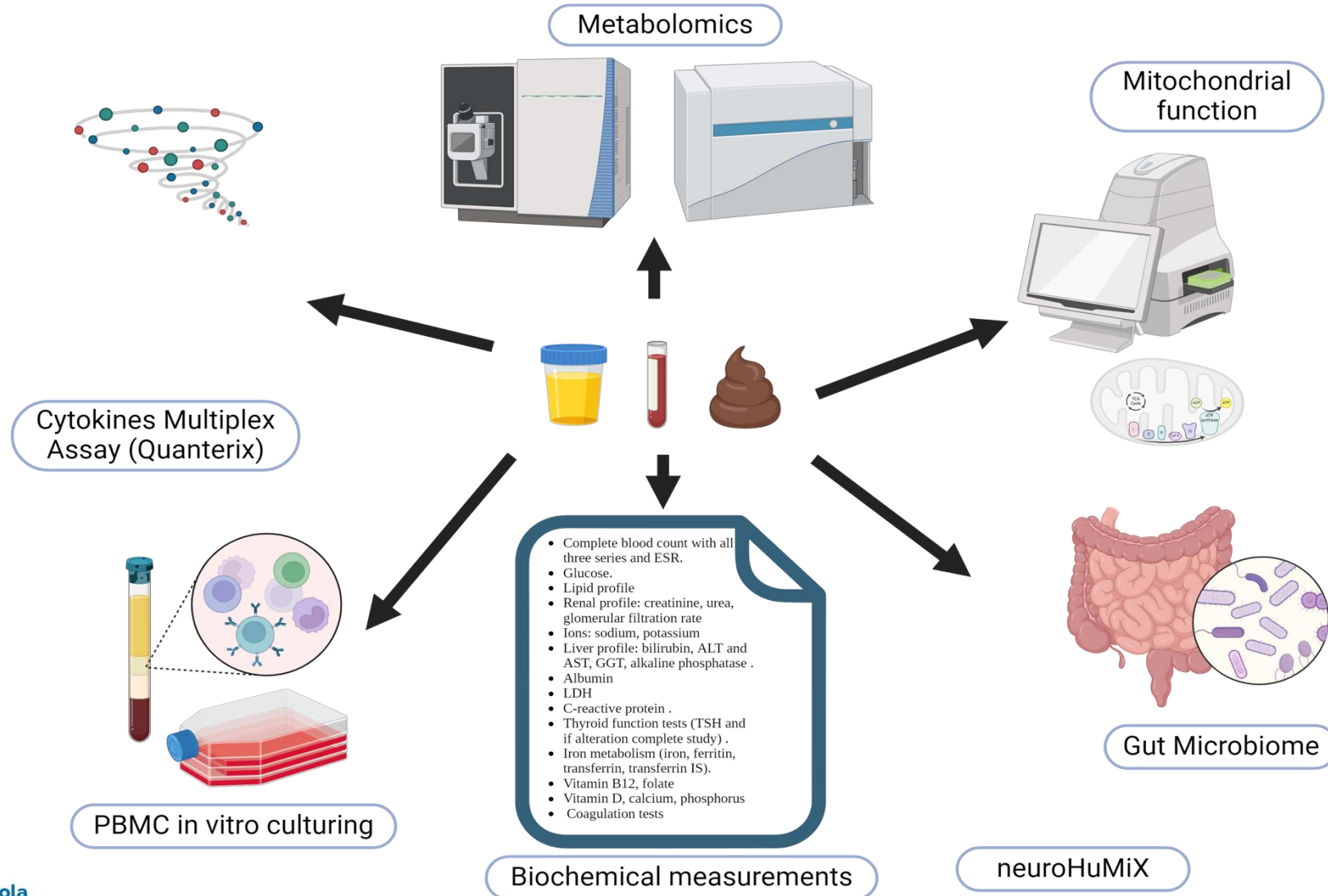


Información adicional: Detalles sociodemográficos, comportamiento dietético, historia médica, medicaciones



Gestión de datos: almacenamiento seudonimizado

• FASTCOV:



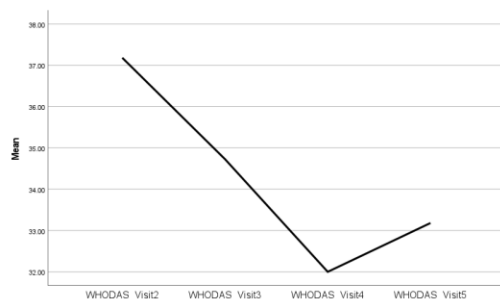
- Resultados preliminares

- La **glucemia** disminuyó significativamente al final de la intervención frente al valor basal.
- Los demás parámetros **bioquímicos (C3, C4, PCR, colesterol, LDL, triglicéridos, serotonina urinaria)** mostraron tendencias a la reducción sin alcanzar significación estadística.

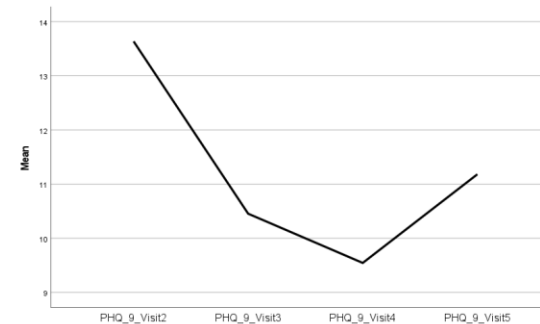


- Resultados preliminares

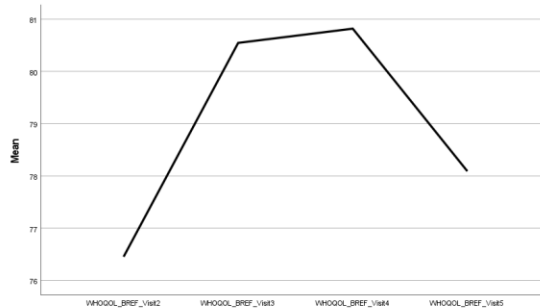
WHODAS



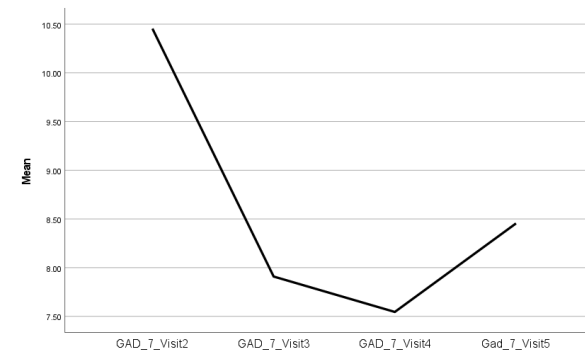
PHQ - 9



WHOQOL-BREF



GAD - 7



- Conclusiones:

- El protocolo de ayuno terapéutico fue **factible** y se asoció con **una mejora significativa** en la regulación glucémica y señales preliminares de beneficio en dominios metabólicos, inmunológicos y psicológicos en pacientes con LCS.
- Estos hallazgos justifican la realización de estudios controlados más amplios para confirmar los efectos observados y explorar los mecanismos implicados.



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